

VOLUME XCIX

NUMBER FOUR

THE NATIONAL GEOGRAPHIC MAGAZINE

APRIL, 1951

Growing Pains Beset Puerto Rico

With 35 Illustrations and Map
27 in Natural Colors

WILLIAM H. NICHOLAS
JUSTIN LOCKE

Portrait of Indochina

With 30 Illustrations

21 Paintings

W. ROBERT MOORE and
MAYNARD OWEN WILLIAMS
JEAN DESPUJOLS

Yosemite National Park

9 Illustrations in Natural Colors

Holy Week and the Fair in Sevilla

With 31 Illustrations
19 in Natural Colors

LUIS MARDEN

Perfume, the Business of Illusion

With 21 Illustrations

LONNELLE AIKMAN

Alaska's Russian Frontier: Little Diomedé

18 Illustrations and Map AUDREY and FRANK MORGAN

Sixty-four Pages of Illustrations in Color

PUBLISHED BY THE
NATIONAL GEOGRAPHIC SOCIETY
WASHINGTON, D. C.

\$5.00 A YEAR

50¢ THE COPY



Growing Pains Beset Puerto Rico

BY WILLIAM H. NICHOLAS

With Illustrations by National Geographic Photographer Justin Locke

AS OUR plane gained altitude, Miami and Miami Beach spread out below us.* The sun shone brightly as we picked up speed and headed southeasterly over the open sea.

The Bimini Islands and Nassau soon flashed beneath us; next, to our left, we glimpsed San Salvador where Columbus made his first landing in the New World. From time to time we sped over low-lying coral islands, mostly devoid of human habitation.

Three hours out, straight on our course, we could see the Caicos Islands, then the Turks, and a few moments later, off to our right, the shore line of Hispaniola.

On U. S. Soil 1,000 Miles at Sea

Another hour and a half, and our objective, Puerto Rico, came into view. We spied the houses of Aguadilla clustered near the northwestern tip of the island.

As we descended, the tropical shore line became distinct—the surf beating against a palm-lined shore, the well-paved highway, waving fields of sugar cane, and off to the south the tree-clad mountains.

Then San Juan rushed up to meet us, its famous old fortress of El Morro outlined grimly at the entrance to the harbor (page 420). Beyond the frowning guardian stretched a modern city, with skyscrapers rising both in the old town and in the fast-growing Santurce district to the east. The marble Capitol gleamed in the sun (page 422).

As we hunked for the landing, heavy automobile traffic took shape on Ponce de León Avenue. Bustling activity was visible at the docks where ships from the States, Latin America, and Spain tied up.

For nearly five hours we had flown away from the continent, 1,000 miles out over the Atlantic; but we were not landing on foreign soil. When we came down at San Juan airport we had arrived in the heart of a teeming metropolitan area of the United States.

Puerto Rico, discovered by Christopher Columbus November 19, 1493, on his second voyage to the New World, is the easternmost of the Greater Antilles. One hundred miles long and 35 miles wide, it lies 70 miles east of the Dominican Republic and 450 miles north of Venezuela. The Atlantic Ocean washes its northern shores; the Caribbean Sea its southern (map, page 424).

Like the other Antilles, Puerto Rico is the summit of a submerged mountain range. Just offshore in the Atlantic drops one of the deepest chasms in the earth—Brownson Deep, more than 30,000 feet below the sea.

Ponce de León, who later discovered Florida and there sought the Fountain of Youth, founded the first settlement, Caparra, near the present San Juan, in 1508 and was Puerto Rico's first governor. The original inhabitants, the Borinquén Indians, soon disappeared, and the island was peopled by Spanish colonists and African slaves.

For four centuries Puerto Rico remained a part of the Spanish Empire, but in 1899 Spain ceded it to the United States as a result of the Spanish-American War. In 1917 Congress declared all Puerto Ricans to be United States citizens. During World War II 75,000 of them served in the armed forces, and three Puerto Rican regiments

* See "Miami's Expanding Horizons," by William H. Nicholas, NATIONAL GEOGRAPHIC MAGAZINE, November, 1950.



Spain Four Centuries Ago Built El Morro's Thick Walls to Guard the Gate to San Juan

Every ship entering the harbor must pass the historic fortress. In 1593 El Morro (The Headland) defied Sir Francis Drake. Obsolete as a military work, it remains a shrine to every Puerto Rican (page 423). Fort Brooke, an Army camp, is built around the old parade ground. Normally it is manned by the 65th U. S. Infantry, a regiment of Puerto Ricans lately fighting in Korea. Suburban Santurce lies beyond the harbor.

distinguished themselves on the battlefields of Europe. Island regiments have also added new laurels fighting in Korea.

On January 2, 1949, Señor Luis Muñoz Marín was inaugurated as Governor. In the island's four and a half centuries of civilized history, its people had elected their own governor for the first time.

A quarter-century ago the influence of the United States was beginning to make itself felt in earnest.* A dozen years later the comingling of old and new was so pronounced that Puerto Rico had become a study in contrasts.†

Vivid contrasts still present themselves, but in decreasing numbers. Today, I soon learned, much of the island is modern. World War II gave it astonishing impetus.

San Juan's Spanish heritage, its beauty, and its progress are revealed to a visitor soon after arrival. As Justin Locke, National Geographic staff photographer, and I entered the airport, announcement of a departing plane

* See "Porto Rico, the Gate of Riches," by John Oliver La Gorce, NATIONAL GEOGRAPHIC MAGAZINE, December, 1924.

† See "Puerto Rico: Watchdog of the Caribbean," by E. John Long, NATIONAL GEOGRAPHIC MAGAZINE, December, 1929.



Puerto Rico's First Elected Governor Works on the Terrace of His Fortress-Home

La Fortaleza, designed for war, has been the Governor's Palace since 1659, when it was rebuilt. Luis Muñoz Marín (reading paper) is the island's first Governor, Spanish or American, to be chosen by the people. Here he confers with Rafael Picó (left), chairman of the Planning Board, and Roberto de Jesús, Director of the Budget. His daughters roller-skate; their mother relaxes. Other callers wait beside the antique cannon.

sounded over the loud-speakers, first in English, then in Spanish. Spanish newspapers and magazines outnumbered English on the newsstands. Directions appeared in the two languages.

Both English and Spanish are taught in the schools, but Puerto Rico is essentially a Spanish-speaking community.

The air terminal itself is basically United States—a converted military hangar, for the Army Air Forces built the airfield during the war. Commercial airlines are using it pending completion of a huge new landing field and terminal building four miles east of Santurce.

But the decorative motif is Spanish. The display of the Caribbean Crossroads Shop, set up by the insular government at the airport to acquaint travelers with the island's handicrafts, is wholeheartedly Spanish.

New Hotel Is Show Place

Through heavy traffic we drove past a palm-shaded U. S. Navy installation and the fashionable San Juan Yacht Club, now undergoing extensive improvements. We skirted tropical Muñoz Rivera Park and soon reached San Juan's newest show place—the \$7,200,000 Caribe Hilton Hotel, a monument to Puerto



412

Puerto Rico's Imposing Capitol Is the Product of Georgia's White Marble

Here the insular Senate and House hold their sessions. The building faces Ponce de León, an avenue named for Puerto Rico's first governor, who sought eternal youth in Florida. Italian and Tennessee marbles trim the interior.

Rico's efforts to increase its travel business and the island's newest social center (pages 428 and 449).

Operated by the Hilton Hotels Corporation, the new 300-bedroom hostelry is the most modern in the Caribbean area. It was designed by Puerto Rican architects and has a lobby entirely open to the cooling breezes which sweep in from the sea. The Caribe Hilton is located on a small peninsula at the eastern tip of old San Juan.

Across the Condado Lagoon rises the Condado Beach Hotel, which was built immediately after World War I. Here an energetic \$1,300,000 face-lifting project has just been completed, marked by the addition of an Olympic-sized swimming pool, private bathing beach, new dining rooms and lounges, and a redesigned lobby decorated with murals from the brush of Hipólito Hidalgo de Caviades, celebrated Spanish artist.

Santurce Resembles Cities on Mainland

The Condado stands in suburban Santurce, where more than four-fifths of San Juan's population of a quarter-million now dwells. Smaller hotels, apartment houses, and hundreds of new homes dot the area between the sea and Ponce de León Avenue, where a thriving commercial center has grown up in the last few decades, detached from San Juan proper. Here, too, rises the shining new Casino de Puerto Rico, noted for the striking Caviades murals which embellish its spacious foyer and ballroom.

If a visitor forgets for a moment the tropical setting, the signs in Spanish, and the jalousies (wooden shutters resembling Venetian blinds), he may imagine Santurce to be the newer section of a half-dozen cities in continental United States.

The topography of San Juan's area in some respects suggests a miniature edition of New York's Manhattan and Bronx, except that whereas the two New York boroughs stretch from south to north, San Juan extends from west to east.

Old San Juan on its narrow island—the harbor to the south and the Atlantic on the north—represents Manhattan; Santurce sprawls out in Bronxlike fashion; San Antonio Channel, separating the old and the new, takes the role of the Harlem River.

El Morro, Grim Relic of Spain

Locke and I found old San Juan to be old only in the sense that New York or Philadelphia or St. Louis is old. For growing San Juan has kept abreast of the times.

Historic, indeed, are the grim fortresses

of El Morro, on the headland guarding the approach to the harbor, and San Cristóbal, at the eastern end of the old city sea wall (pages 420, 440).

The Spaniards began to build El Morro in 1539. They did not finish the job for 67 years. Every bit of the fortress's enormous five-tiered pile of limestone, rising 140 feet, was carried to the island as ballast in Spanish ships. The 30-foot-thick walls sweep upward from an old gun platform, washed by the Atlantic, to the broad, windswept ramparts that crown the headland.

El Morro stood off the intrepid Sir Francis Drake in 1595. The English and the Dutch each succeeded once in capturing San Juan and holding it for brief periods, but they couldn't do it by a direct attack on El Morro.

Massive San Cristóbal didn't see as much warfare, but its tunnels and dungeons are intriguing. On the wall of one narrow cell, lighted only by beams penetrating a tiny ventilating shaft, are preserved the likenesses of seven Spanish galleons, painted by a luckless artilleryman confined there pending his execution for mutiny.

The two fortresses; the tiny fort of El Cañuelo across the harbor; and Casa Blanca, built in 1523 as a residence for Ponce de León, have been incorporated into the San Juan National Historic Site, under the jurisdiction of the U. S. National Park Service. Puerto Rico school children are brought to San Juan by bus to see these island memorials.

Old Fortresses in Use Today

But one need not think that they are mere relics. Detachments of Puerto Rico's famous 65th Infantry, encamped at Fort Brooke adjacent to El Morro, garrison the old fortress, which is equipped today to do duty in modern warfare. At San Cristóbal I saw U. S. Signal Corps installations and the island's Military Police headquarters.

Although Ponce de León never actually lived in gleaming Casa Blanca, his family owned it until 1773, when the Spanish Government took it over. Today, far from being uninhabitable, it is the residence of the Commanding General, U. S. Army Forces, Antilles.

La Fortaleza, now the Governor's Palace, originally was built as a fortress early in the 16th century. Reconstructed after a fire in 1639, it became the residence of the Governor and has so continued. In 1940 the building and its exquisite tropical gardens were restored at a cost of half a million dollars.

Still very much in use is the charming old Municipal Theater, built a century and a quarter ago and completely restored only re-

Atlantic Ocean



Caribbean Sea

424

Drawn by Harry S. Oliver and Irving E. Johnson

Living Room Grows Scarcer for Puerto Rico's 2,211,000 Citizens

Eastermost of the Greater Antilles, the island stretches 100 miles long and 35 wide. It contains the same space as Rhode Island and Delaware combined, but holds twice as many people. Though many migrate to the States, congestion grows apace.

cently. Upper and lower tiers of boxes surround a horseshoe-shaped auditorium.

Here I heard the musical Trapp family, Austrian refugees whose home now is in Vermont, give a concert. The German-speaking Trapps concluded their presentations with a group of Venezuelan and Colombian folk songs in Spanish, which delighted the audience of Spanish-speaking citizens of the United States.

Old San Juan's teeming streets are narrow, and many of its business houses were erected a century or more ago. But merchandising is up-to-date. Nearly every product comes from the U. S. mainland, or "continent," as Puerto Ricans call it, and nationally advertised brands are available everywhere.

The 10-story Banco Popular dominates the downtown skyline. A large and imposing leaded-glass window lights its main banking room. From the perfectly appointed Bankers Club restaurant on the top floor I enjoyed a striking bird's-eye view of the city and bay.

The strong Banco Popular, with its numerous branches, is purely a Puerto Rican institution. Near it, in the downtown financial district, stand the modern buildings of the Chase National Bank and the National City Bank of New York, and also the houses of the Bank of Nova Scotia and the Royal Bank of Canada. Both of these Canadian financial institutions have had branches in Puerto Rico since early in the century.

But prosperous, bustling San Juan is not Puerto Rico. I knew the island was beset with growing pains and that it had serious economic problems to solve.

Puerto Rico's population in 1940 was 1,869,000. Now it has increased to 2,211,000.

Its area is not much larger than Rhode Island and Delaware. If continental United States were populated as densely as Puerto Rico, it would have 1,900,000,000 inhabitants!

Modern medicine, hygiene, and transportation have cut the death rate materially. I was driving in the mountains with a Puerto Rican friend one day when suddenly I was startled by the wail of a siren. An ambulance soon sped past me.

A few years ago friends might have taken two or three days to carry that patient down from the hills to a hospital for treatment, and, if the case had been serious, death might have resulted.

Baby Born Every 5½ Minutes

The birth rate in Puerto Rico has remained constant. A baby is born on the island every 5½ minutes. Infant mortality has been drastically reduced.

"The main trouble with Puerto Rico," an island leader said to me in a spirit of oversimplification, "is that there are too many Puerto Ricans. We just don't have enough jobs to go around. Agriculture, and that means sugar, primarily, can't solve the problem."

One of the first men I met in Puerto Rico was dynamic Teodoro Moscoso, Jr., head of the Puerto Rico Industrial Development Company. This organization was set up by the insular government in 1942 to bring industry to the island and thus help reduce unemployment. Many Puerto Ricans are well-to-do; some are wealthy. But because of overpopulation unemployment never falls much below 80,000 and in slack agricultural seasons far exceeds that figure. Thousands of Puerto



Twanging Guitar and Rattling Gourds Blend in Rustic Concert

Puerto Ricans love *décamas*, 10-verse songs similar to Trinidad's calypsoes; *piezas*, folk tunes; and *agüinaldos*, haunting Christmas carols. They call their guitar a *cuatro* (four), though it has six strings. Gourds, containing rattling beans, are known as *maracones*.

Ricans have never been gainfully employed.

Through his resourcefulness and energy, Moscoso has induced 100 industries, large and small, to locate on the island, thus furnishing about 14,500 new jobs. Other industry has arrived independently, to create more work.

Moscoso's first big development job, back in the war years, was to build a government-owned glass factory to manufacture bottles. The war produced a tremendous demand for Puerto Rican rum on the mainland. Since excise revenues on rum are returned to the island, Puerto Rico at last had a chance to realize substantial sums for its treasury. But

something was needed in which to put the rum.

Moscoso was unable to get priorities for shipment from the United States of the modern machines needed to make bottles. He had built a plant, but he had no equipment for it. When all seemed lost, a delegation of Congressmen visited the island early in 1943.

Moscoso explained the island's plight to the delegation, which went back to Washington and worked successfully to get priorities.

The \$4,000,000 plant was able to do its part in helping to export \$84,000,000 in rum during and immediately after the war.

When I visited the glass plant, in a gov-

ernment industrial area of San Juan, it was running at top speed, turning out 35,000 gross of bottles of many types each month. An export trade in bottles of about \$1,000,000 annually had been built up in the Caribbean area.

The Development Company also built a cement plant, a clay products plant, which were profitable, and a paper plant to make wallboard, which wasn't. The paper mill, a war measure, was designed to use bagasse, the waste of the sugar cane, as a raw material.

The next step was to sell these factories to private industry for the purpose of recovering the funds invested and using them again to build more factories.

The Ponce Cement Company, owned by the Ferré group in Ponce (page 459) acquired the four plants last October for \$10,500,000.

Since the war, the Development Company's efforts have been aided by legislation which permits 12 years of tax exemption until June, 1959, to new industry.

Largest of the factories to be erected under this plan are the Crane China Corporation pottery and textile mills for Textron, Inc., operators of textile mills in New England and the South.

Girls Acquire Pottery Skills

The china factory, headed by Earl Crane, president of the Iroquois China Company of Syracuse, New York, had been in operation 13 months when I visited it.

Of the 465 employees in this ultramodern pottery, all but seven were islanders. Two-thirds had never had jobs before.

"We are trying to do in six months what it takes three years to do on the continent—make a skilled pottery worker," Mr. Crane said. "We preferred workers who had had no previous employment. It has been a wonderful experience. Puerto Ricans have a natural dexterity with their fingers.

"Changes in the girls in the decalcomania department have been amazing. They first came to work from their hill-country homes in worn and ragged dresses. After a week or so we could notice a little lipstick here and there, then some new shoes, then some new dresses. Look at them now."

And he beamed as he glanced at the rows of neatly dressed, dark-eyed girls, each performing her delicate task of transferring patterns to the pieces of china.

"Not only that," he pointed out, "but in many instances their wages represent their families' only income.

"In Syracuse," Mr. Crane went on, "'decal' girls put the designs on the pieces, stacking

the pieces one upon another as they finish. Then another girl comes along, picks up the stacks, carries them to a washing basin, and washes off the paper from which the design has been transferred.

"We tried to do that here, but we couldn't. The girls are too much interested in their work. They want to see how well they are doing their job, and how pretty the designs look. So we let each girl wash off her own pieces. She prefers it that way.

"Of course our production rate is not yet up to standards of the mainland. We still have entirely too many rejected pieces. But we are certainly making progress."

The Crane Company makes high-grade hotel china, most of which is shipped to the U. S. mainland.

The Textron plant in the city of Ponce, near the southern coast, went into active production on January 1, 1950. It now employs 450 learners. About 350 will be retained as permanent, experienced employees.

Another Textron mill, for weaving rayon and nylon, is being built at Humacao, near the eastern end of the island. It will be larger, with about 500 employees.

Other United States manufacturers who have built plants in Puerto Rico in recent months include the Beacon Manufacturing Company, one of the Nation's largest makers of blankets; the St. Regis Paper Company; and the Tennessee Knitting Mills.

Among the more numerous smaller enterprises are Brilliants, Inc., a diamond-cutting and polishing concern in a San Juan suburb, and Tycoon Tackle, Inc., makers of deep-sea fishing tackle, in Mayagüez, at the western end of the island.

Catching Up with Housing Demand

During World War II, building of U. S. Army and Navy installations in and near San Juan, together with other wartime enterprises, caused thousands of Puerto Ricans to move from the countryside and the small villages into the metropolitan area to obtain war work. Few left after the close of hostilities. No home building took place during the war. So San Juan was confronted with a desperate housing shortage, which has not yet been wholly alleviated. The same situation prevailed in the cities of Ponce and Mayagüez.

Of Puerto Rico's approximately 400,000 families, a fourth now live in congested urban areas in unsatisfactory surroundings. The island's new housing plan calls for building 30,000 new living units for them in the next six years.

This would seem to provide for a reduction





Atlanta & South Atlantic Railway Hotel & Dining Hall, Two of San Juan's Best for Travelers

Atlanta & South Atlantic Railway Hotel & Dining Hall, Two of San Juan's Best for Travelers
The building is a large, multi-story structure with a prominent central tower and multiple wings, surrounded by lush greenery and a large lawn. The building has a light-colored facade and a dark roof. The scene is set in a park-like environment with trees and a clear sky.

Excavation Made on Her Yards, - Spent Evening at Home at Sunset

At 10:30 AM. I left for the excavation. The weather was very warm and sunny. I went to the excavation site and found the workers had just finished the first day's work. They had dug down about 10 feet and had found some interesting things. I went down with them and saw the work. The workers were very busy and were digging fast. I saw some of the things they had found and was very interested. I went back to the house at sunset and found the workers had finished their work for the day. They had dug down about 20 feet and had found some interesting things. I was very happy to see the workers had finished their work for the day. I went to bed at 10:30 PM.





Lake Caonillas Is Man's Creation and Servant. Its Electric Power turns Puerto Rico's Wheels



Salvador Cruz Working His Family's Corn Patch. Watches a Storm Break over the Sierra Morelia.

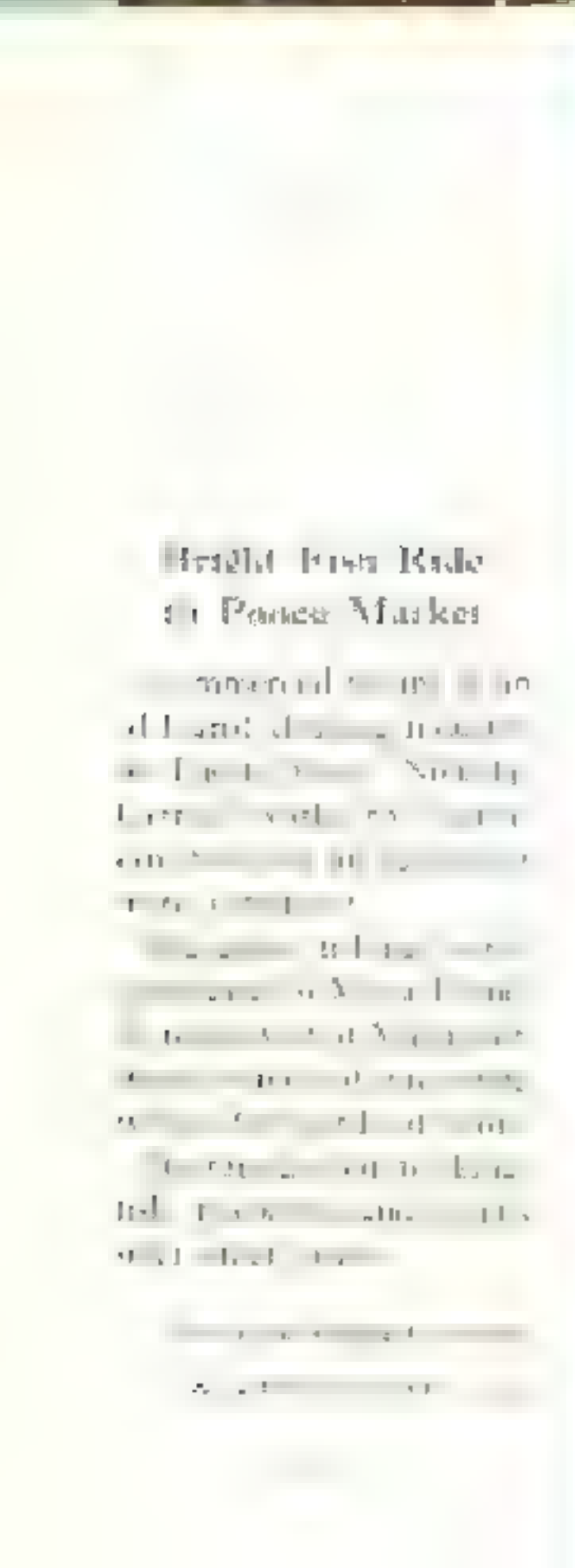


Puerto Rico Grows 10-pound Pineapples

When West Valley State University students returned from a recent trip to Puerto Rico, they brought back a large pineapple from the island.

Most students have never seen a 10-pound pineapple before. It is found in the island.

Students who have seen the pineapple have been told that it is not as sweet as the ones they have seen in the United States. The pineapple is



Bright Fish Ride to Ponce Market

Commercial fish are sold and displayed in the Ponce Market. Some of the fish are very large and are sold in large quantities.

The fish are sold in large quantities and are very fresh. They are sold in large quantities and are very fresh.

The fish are sold in large quantities and are very fresh. They are sold in large quantities and are very fresh.

The fish are sold in large quantities and are very fresh. They are sold in large quantities and are very fresh.





Severe Struggles of a Machete Man in Sugar-cane Jungle



Day's Work Is Done. Weary Oxen Still Yoked to Carts Enjoy a River Bath

in slum dwellers to 70,000 families. But at the present rate of population increase the same will have 12,000 new families by that time, so the net gain in new living quarters will amount to only 18,000. Of course private construction will add materially to the new homes available.

San Juan is making heroic efforts to eradicate its worst slum spot, the Mulhola, at the entrance to the Martín Peña Channel. Here, before and during the war, 70,000 squatters built nondescript homes ranging from mean shanties to more substantial dwellings. Some 1,500 of these houses have been moved bodily to the new San José housing development, and more are on the way. Shanties too poorly constructed to move are torn down as soon as new living quarters for the occupants have been found.

Houses are moved to San José free of charge, free paint is handed to the owner so he can spruce the place up, and free running water, shower bath, and sewer connections are installed. If the owner can afford to buy the lot, he can spread payments out over 20 years. If he does not choose to do that, he can rent the lot for from 50 cents to \$4.50 a month, depending on his income.

37 Houses Built in One Day

In Rio Piedras, San Juan suburb, a South Carolina engineer is engaged in an enormous single-family housing development. More than 4,000 four-room concrete houses have been erected and sold thus far. Price is around \$4,000 each, which includes the cost of the lot at \$1,200. Others are being built, and Leonard D. Long, the Charleston man backing the project, talks in terms of thousands more.

The houses are built of concrete poured in aluminum forms. Two men can lay the base strip for the walls in two hours and erect the entire walls in five days. In good weather, with a maximum of 5,000 workers on the job, Long has finished off as many as 37 houses in one day.

Called the Puerto Nuevo project, the development comprises 700 acres bought by Long for more than \$1,000,000. Each house has a modern kitchen and running water. Because of the Puerto Rican climate, windows are not necessary. Metal shutters are sufficient protection. The whole development is crisscrossed by paved streets and a sewer system (pages 438-9).

Helping to alleviate to some extent both the unemployment situation and the housing shortage has been the postwar migration of Puerto Ricans to the United States. From

1941 through 1945 more than 27,000 came to the mainland. Since V-J Day five times that number have departed from their home island. Most of these have settled in New York City. Charter airlines vie for the migrant trade, charging fares varying from about \$35 to \$70.

In the heart of rapidly growing Rio Piedras, which is a part of the San Juan metropolitan area and is more populous today than Wilmington, Delaware, I visited the University of Puerto Rico.

Its prewar buildings of Spanish architecture, with polychrome terra-cotta facades, are grouped around a quadrangle and dominated by an imposing 170-foot clock tower on the Administration Building. But new buildings of modern design, and less ornate, are rising on the campus to care for the institution's growing needs.

From 1920 to 1930, enrollment more than doubled; from 1930 to 1940 the new enrollment figure was tripled. Now in the last ten years, that figure more than doubled again. Today 12,000 students attend courses here and at the University's College of Agriculture and Mechanic Arts at Mayaguez.

Some 2,000 are G.I.'s, most of them in the Industrial School on the Rio Piedras campus. This school is equipped with \$2,000,000 worth of machining tools and other apparatus for courses such as mechanics, baking, and radio and electronics (page 447).

The famous School of Tropical Medicine in San Juan is recently expanded by the University. Most of its plant has been turned over to classrooms and laboratories for the new Medical School. First on the island, it will have about 50 students this first year. The 52-bed hospital of the School of Tropical Medicine has been converted into dormitories.

Heretofore, all Puerto Ricans wanting to study medicine had to seek enrollment in already crowded schools on the mainland.

University Owns Monkey Island

In taking over the School of Tropical Medicine, the University also acquired 37-acre Cayo Santiago off the eastern coast of Puerto Rico. Here dwells a colony of some 500 rhesus monkeys and their gentleman-in-waiting, Rafael Luis Neva, only human being who lives on the island.

About 15 years ago the School of Tropical Medicine installed there two dozen rhesus monkeys brought from India. The hope was to raise a colony to supply monkeys for medical research. The climate suited them perfectly and they thrived and multiplied. Now there are 400 many.

Locke and I told Dr. Fernando Bueso, dean

of natural sciences at the University, that we would like to visit the island.

"Are you fellows as healthy as you look?" he asked. We assured him that we were.

"All right, then. But we have to be careful about our monkeys. No danger of their harming you, though. They're wild, but they will be afraid of you, since to them you will simply be bigger monkeys!"

Nieva met us at the Eastern Sugar Associates dock at Playa de Humacao with his outboard, and soon we approached the little landing on monkey island. Two or three monkeys strolled down to meet us. A dozen more looked us over from vantage points in trees as we climbed the hill to Nieva's bachelor quarters. We noticed the heavy screens on doors and windows.

"They would love to come in," he said.

He continued to say that in a few days

Monkey King Deposed by Rival

Beyond the back porch, on a platform in an open shed, sat a big monkey with a badly disfigured face.

"I thought all these monkeys were extremely healthy," I said.

"He's the exception," Nieva replied. "He was king of the island until last week. Then one of the other chiefs beat him in a terrific battle that lasted an hour. I couldn't break it up. I even ran to the house, got my shotgun, and fired it in the air. That ran to cover all the other monkeys who were watching the battle, but the two fighters paid no attention. Finally this one knew he was beaten and ran away. Now he has to stick to his own section of the island."

The monkeys lived in four distinct tribes, two large and two small. Each has a chief, and each lives aloof from the other tribes. But the king of the island is the chief that can beat the other three chiefs. He wanders over the whole area at will.

At 8 o'clock each morning, Nieva's four helpers from the mainland arrive with the day's menu of fruits, vegetables, and vitamin reinforcements. Each attendant places a large basketful of food on his head and solemnly strolls to the feeding place of one of the tribes. Its members run along with him, clattering noisily. It would never do to try to make all the monkeys eat together. The four tribes would fight it out to the death.

Nieva gave me a handful of dried corn, and I offered it to a score of monkeys that had gathered near the back porch. But only the King of the Island approached for a tidbit. The other monkeys were not afraid of me; they were afraid of the King. So Nieva

chased him away, and soon the other monkeys gathered close for handouts.

But these animals were very wary.

"I'll give you a dollar apiece for every one you catch," said Nieva. We left the island without accepting his offer.

Ascent to El Yunque

One of the most memorable drives in Puerto Rico leads from San Juan through the Luquillo Division of the Caribbean National Forest, a preserve of 65,450 acres in the eastern part of the island.

Locke and I set out on this journey one pleasant Sunday morning over good hard-surfaced roads. Driving eastward along the northern coastal plain, we passed grapefruit and sugar cane plantations and here and there a large dairy. On our right rose the Sierra de Luquillo, most imposing chain on the island, crowned by spectacular El Yunque, 3,494 feet above sea level, and slightly higher El Toro, loftiest pinnacle in the range.

Beyond the farming town of Carolina we crossed the Rio Grande de Loiza, one of Puerto Rico's largest rivers. It almost bisects the island. Twenty-five miles from our starting place, in the town of Palmer (Maneyes), we deviated from our course a few miles to Luquillo beach.

Although it was early in the day, hundreds of city dwellers had arrived and more were on their way to this favorite bathing and boating place, with its booming surf and crescent shaped, palm-fringed sands.

Back in Palmer, we turned into the forest highway and began our ascent. As we passed the tumbling Rio Maneyes, women pounding their washing on the rocks and spreading it out to dry waved to us cheerily. Children along the roadside offered wild strawberries and flowers for sale.

A little farther up signs of a wetter climate began to appear, for this is a rain forest with rank, lush tropical growth. Average annual rainfall in the vicinity of El Yunque is about 180 inches, three times that recorded in San Juan. One year, rainfall measured 254 inches. About 133 heavy showers fall every month, but they last only 20 minutes on the average. Despite the heavy precipitation, rain falls only 6 percent of the time.

Soon we became aware of the graceful giant tree ferns, *Cyathea arborea*, along the sides of the road. Found only in the Tropics, some grow to a height of 30 feet.

At a point about five miles from the entrance to the park a spectacular view burst upon us as we entered a cleared area. Below, on our left, the tiny town of Luquillo hugged the At-



Climbing Darn Hurricanes Power for Western Puerto Rican Farms and Factories

When the wind blows from the east and the clouds are heavy, the power lines are in the air. The power lines are in the air. The power lines are in the air.

to the coast. Beyond stretched the San Juan capes (Cape San Juan and Cape San Juan) (La Cerdillera), which form the northernmost point of the island. Farther to the east we could see Culebra Island, 30 miles away, which often figures in the maneuvers of the U. S. Navy's Atlantic Fleet.

On a clearer day, we were assured, we would have been able to see Crown Mountain on St. Thomas, one of the Virgin Islands, 55 miles away.

We continued our ascent to La Mina Recreational Area, 1,500 feet above the sea, where we left our car to stroll up a trail to the La Grande swimming pool. Harder

than when we were splashing about in the chilly water. The trail went through the dense forest to a group of ancient ruins.

"Elfin Woodland" Grows in Yunque

Now the summit of El Yunque was clearly visible, 1,300 feet above us. The peak is covered with dwarf growth known as "elfin woodland" because of its similarity to the forests of the mountains. The trees were tiny, with thin trunks, branches, twigs and even leaves. Injerto de palma was the most common, and the trees were very low. The forest was very dense. The forest was very dense. The forest was very dense.



Puerto Nuevo, City of Concrete Springs Up Like Magic in Rio Piedras

Here is another view of the city of concrete. The city of concrete is a new city, and it is built on the hillside. The city is built on the hillside, and it is built on the hillside. The city is built on the hillside, and it is built on the hillside.



Puerto Rico's Single-Family Housing Projects Call For 20,000 Dwellings

Under the auspices of the Federal Housing Administration, the Puerto Rico Housing Authority has announced that it will be constructing 20,000 single-family dwellings in the next five years.

The first ten miles we had traversed before, since we had visited Bayamón, a town of some 20,000, on Good Friday to see the religious procession there (pages 450, 451, 457). The Church of the Holy Cross in the plaza, built some 200 years ago, marked the establishment of the town.

One of Puerto Rico's outstanding artists, the painter Francisco Oller (1833-1917), was born in Bayamón. Were he living today, he would view with unconcealed interest the striking painting over the altar in the church—a modern conception of the Crucifixion from the brush of a Dutch priest stationed in the parish in recent years.

The cross is a gnarled branch; the body of Christ in tortured shape is affixed to the branch. The predominating hue in the canvas is a deep purple. The whole conveys a sense of anguish that is overpowering.

From Bayamón we drove westward along the coast, past extensive fields of sugar cane. It was harvesttime. Lines of men armed with machetes attacked the cane (page 433). Along the roads we passed huge trucks, horse-drawn wagons, and ox carts, all heavily laden and proceeding to the nearest *central*, or sugar mill. Often railroad tracks paralleled the road, sending spurs into some of the fields. Cranes loaded the waiting cars with cane, and small engines pulled them off to the mills.

We left the main road to drive through the by-passed villages of Vega Alta, Vega Baja, and Manatí each centering about its plaza, at one end of which stood the church.

At Arecibo, one of the island's oldest cities, settled four years before the Pilgrims reached Plymouth, our progress was impeded by long lines of trucks converging on the two sugar mills there.

At the northwest tip of the island the military highway came to an end at Ramey Air Force Base, permanent base built during World War II and now headquarters for the 24th Composite Air Group. Remote yet self-sustaining, the base has a business plaza with a group of stores, including a beauty shop for the wives of airmen. Since the war the base has been improved and now boasts a golf course and a palm-fringed bathing beach.

Just Where Did Columbus Land?

Generally speaking, the military layout of Puerto Rico comprises the Air Force at the western end, much of the Army near San Juan, and the Navy, a part of the 10th Naval District, at Roosevelt Roads, on the east end.

Driving south along the indented coast, we entered Aguadilla, gateway to an interior agricultural region. We visited near-by Parque

de Colón, on the banks of the Culebrinas River, and learned that Columbus had made his original landing there. A cross marks the alleged spot.

Later, at Aguada, we saw another cross at the foot of Colón Street, also marking the original landing of Columbus; and farther along the west coast we found a third. We heard there were more. But at each disputed location the sea view is superb!

The Way Sugar Is Made

Near Mayaguez we inspected the Central Igualdad, one of the larger of Puerto Rico's 34 sugar mills. A huge refinery adjoins the mill. We saw a hundred laden trucks standing in line, waiting their turn at the receiving center.

A crane picks up a truckload of cane in a single gulp and deposits it on a moving chain. Swiftly it is carried into a series of revolving knives, then crushed by another series of heavy rollers, or mills, which extract about 95 percent of the juice. The bagasse, or residue cane, goes directly into the furnaces beneath the huge boilers as fuel.

The juice is treated with milk of lime, heated, and pumped into a clarifier. Later it is boiled into a syrup, then further boiled in vacuum pans under low pressure, whereupon it turns into a mass with a large proportion of sugar crystals. This is known as A sugar.

In further steps, the mother syrup is separated from the crystals, which take on the familiar appearance of raw, or brown, sugar. The residue from the various clarifying processes is known as final, or blackstrap, molasses.

By the time Locke and I had toured the central and the adjoining refinery, we were exceedingly hot and thirsty. We gratefully drank a glass of cold *guarapo*, or pure cane juice, handed to us as we entered the cooler area of the mill's laboratory. But we were cautioned not to drink too much—cold *guarapo* is delicious, but it also possesses laxative properties.

Of the 14,000 sugar cane growers in Puerto Rico, the big majority raise only a few tons each. Most of the production comes from a few large landowners. Eight to nine tons of cane produce about one ton of sugar. A central like Igualdad has a capacity of about 3,000 tons of cane in a 24-hour day.

Growers deliver their cane to the mills for processing, and are paid on the basis of about 65 percent of the proceeds from the sugar it yields. The higher the sugar yield, the higher is the price paid for the cane.

Production and marketing of sugar, both

raw and refined, are subject to the Federal Government's quota system. Average annual output of raw sugar for the last 10 years was 986,500 tons. The island's quota is 910,000 short tons, raw value, of which about 126,000 tons may be sold in refined form in continental United States. Puerto Ricans themselves use about 100,000 tons yearly.

Minimum wage rates for cane-field workers are set by the Secretary of Agriculture under the Sugar Act of 1948, and also by the island's Minimum Wage Board.

Needleworkers of Mayagüez

Mayaguez, fourth largest city on the island, is the center of a big sugar-producing area, with a seaport for shipping it to the United States.

Mayaguez is also the center of the needlework industry, which now employs about 70,000 women. Needlework is considered by many students to be second in importance only to sugar from an economic standpoint.

During World War I, when European and Asiatic markets for embroidery and drawn work were cut off, two small factories were opened in Mayaguez and Ponce to produce women's cotton underwear and blouses. A year later table linens were added, and then handkerchiefs.

After the war, to hold the business, manufacturers taught the dexterous Puerto Rican women and girls how to do French hand rolling, tatting, and many other fancy stitches. This was not too difficult to do, for the island long had been noted for fine embroideries. Hand-sewn gloves became another important product.

By 1927 the industry was thriving. It suffered from the depression of the '30s, prospered again during World War II. But today serious competition from China, the Philippines, Madeira, Czechoslovakia, and even Japan, is causing apprehension.

I talked with genial Sam Schweitzer, president of the Puerto Rico Needlework Industry Association in his Mayaguez glove plant. Near us scores of women had gathered at the distributing center to receive consignments of gloves to be taken home and finished or to turn in completed pairs.

"Island needlework is a home industry," Mr. Schweitzer said. "In the rural sections wages from needlework often represent a family's only income during the dull season in sugar, when the men are out of work. Seventy-five to 80 percent of the millions of dollars brought to the island by needlework exports is paid out in wages to these home workers.

"Hygienic conditions in thousands of rural

homes have been notably improved, since homes must meet definite standards along this line before materials may be taken into them for sewing."

Bamboo Creates Industry

An Experiment Station of the U. S. Department of Agriculture at Mayaguez tests new agricultural products for the island and improves old ones.

For example, bamboo is not native to Puerto Rico. One species, *Bambusa vulgaris*, was introduced more than a century ago. Flourished. I saw 30 species and varieties established on the station grounds. Now several industries utilize various types in the manufacture of fishing rods, furniture, picture frames, lamps, and ladies' handbags.

The station also is experimenting in the cultivation of the bay rum tree (*Pimenta racemosa*) on steep and rolling land which today is virtually profitless. Bay oil, distilled from the leaves of the tree, is a component of bay rum lotion.

To replace acreage formerly devoted to growing coffee, an industry curtailed in recent years because of hurricanes, improper care, and sharp competition, the station is studying the possibilities of vanilla culture.

In vegetable growing, much study has been given to new varieties particularly adapted to Puerto Rico's climate and soil. Particular attention has been paid to cucumbers, eggplant, lettuce, okra, peppers, pumpkin, squash, sweet potatoes, and, above all, tomatoes. Yams from tropical Asia have been found to be better and more prolific than native yams.

Giant Pineapples Twice Normal Size

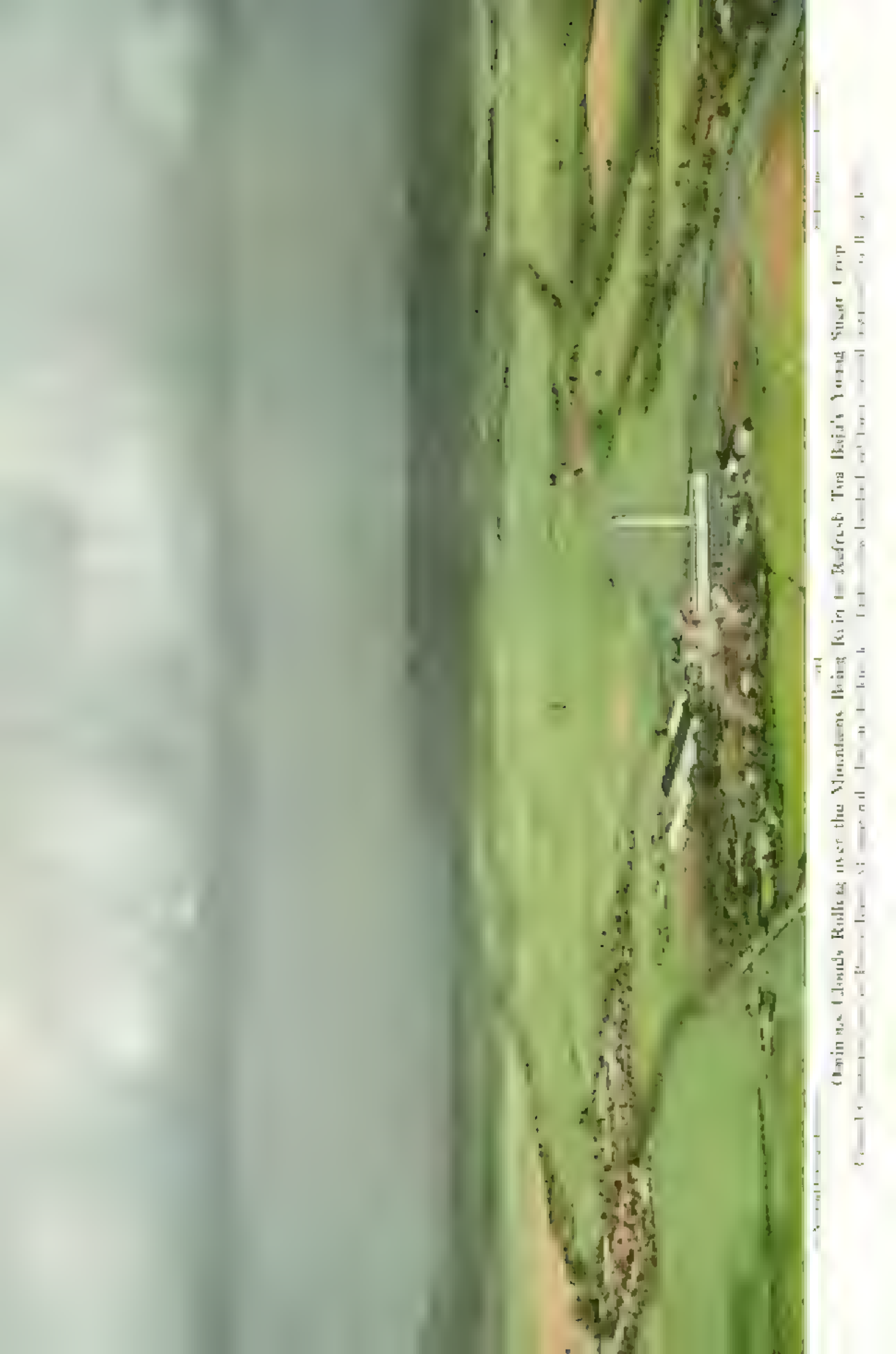
The pineapple industry has assumed a growing importance since World War II. In the southwestern section "giant" pineapples, twice the size of normal fruit, have been raised (page 442). Annual production of pineapples is approaching 100,000,000 pounds. Much of it is canned on the island.

From Mayaguez to Ponce we skirted the western and southern coasts, stopping near Cabo Rojo to visit what is known as (page 437), and pausing in San Germán to visit what some Puerto Ricans believe is the oldest Christian church in the New World. Potosí Coeli was built by, and for, Indian slaves as a mission church in 1511, three years after the settlement of Puerto Rico. It is not now in use, but plans have been drawn for its restoration.

And southwestern Puerto Rico now is the scene of a \$24,000,000 hydroelectric and



Uncovered Sembras Preserve the Flavor of Old Spain in Barranquilla



Clouds rolling over the mountains being built for the new road. The building is the new road.

Flamingo Trees Thrown a Dazzling Archway Across Puert Rico's Southern Coastal Road

A view of the flamingo trees in the southern coastal road of Puerto Rico.





A Farmer Weighs His Stragless Beans, Red Cabbages, and Turnips under Lamp-light

Market stall, showing the farmer weighing his produce. The farmer is standing behind a counter, and the produce is displayed on the counter. The stall is covered by a wooden structure, and the lighting is provided by a lamp.

Raw Sugar Cane: Who Wants Better Candy?

At the Rio de Janeiro Sugar Cane Festival, the city's largest annual celebration, the raw sugar cane is the star of the show. The festival is a celebration of the city's rich cultural heritage and its love for the raw sugar cane.

The festival is a celebration of the city's rich cultural heritage and its love for the raw sugar cane. The festival is a celebration of the city's rich cultural heritage and its love for the raw sugar cane.

Ex-Glue From Cake

At the Rio de Janeiro Sugar Cane Festival, the city's largest annual celebration, the raw sugar cane is the star of the show. The festival is a celebration of the city's rich cultural heritage and its love for the raw sugar cane.

The festival is a celebration of the city's rich cultural heritage and its love for the raw sugar cane. The festival is a celebration of the city's rich cultural heritage and its love for the raw sugar cane.



Water Cylinders Filled For the Garage Floor. All 34 Rooms For the Private Battery

The 100th has been moved to a new location. See the map for the location.

See map for location.

100

See map for location.





Nottingham, England

March 1, 1901

Children Dresses as a Nazarene for the Good Friday Procession in Bayamón

A group of children, dressed as the Nazarene and the Virgin Mary, participating in the Good Friday procession in Bayamón, P.R. The children are carrying a large cross and a banner.



Iriza Portrays the Woman of Samaria, Who Gave Jesus a Drink from Her Waterpot
 Iriza, who played the role of the Samaritan Woman in the film "The Ten Commandments", is the first actress to have played the role of the Samaritan Woman in the film "The Ten Commandments".
 (From the collection of the National Film Library, New Delhi)



1874. The woman sitting on the bench in the garden. The woman is looking down at a book or a small object in her lap. The garden is lush with green foliage and a path leads away from her. A large tree is on the left, and a small building is visible in the background. The style is soft and impressionistic.

Proprietor's Junior High School Program with Glass Shutters for the Ullrich, Wind, and Rain

Proprietor's Junior High School Program with Glass Shutters for the Ullrich, Wind, and Rain





CRUDE SUGAR MOVES IN BULK. Suction Pumps, Bypassing Bags and Stevedores, Load the Ship
 With Sugar. The Sugar is then packed in bags for export. The sugar is then packed in bags for export.
 The sugar is then packed in bags for export. The sugar is then packed in bags for export.



• Salt Evaporated from Sea Water,
Wheels to new Drying Rack

Unwashed wool is brought to the drying rack
where it is laid out on the racks to dry. A
great deal of salt is removed from the wool.

✦ Hanks of Merges Fiber Become
Bright Mass and Rags

Staple fiber is made from the wool of
Merges. It is spun into a fine thread
and then made into a mass of rags.





A Spontaneous Wedding at the Home of the

The wedding was a spontaneous affair, and the bride and groom were not even aware of the ceremony until they were standing at the altar. The bride was wearing a white dress, and the groom was wearing a white suit. The ceremony was held in the home of the bride's mother, and the guests were all family and friends.

A Wedding at the Home of the Bride's Mother

The wedding was a spontaneous affair, and the bride and groom were not even aware of the ceremony until they were standing at the altar. The bride was wearing a white dress, and the groom was wearing a white suit. The ceremony was held in the home of the bride's mother, and the guests were all family and friends.

The wedding was a spontaneous affair, and the bride and groom were not even aware of the ceremony until they were standing at the altar.





Rio de Janeiro Gervania Clips and Shapes Its Jacaranda Trees into Living Sculptures

The trees are a variety of Jacaranda. They are not only beautiful, but also very hardy. They are planted in the city of Rio de Janeiro, and are a great sight to see. They are a great sight to see in the city of Rio de Janeiro, and are a great sight to see in the city of Rio de Janeiro.

irrigation project, which is expected to add 30,000 acres of productive soil.

Five mountain reservoirs and two power stations will be part of the system designed to bring water from the mountains into dry Lajas Valley (Valle de Lajas), which contains some of the best land (pages 430-1, 437).

Locke and I early came to the conclusion that Ponce deserved its title of "Pearl of the South."

On one side of the double plaza stand ancient one-horse coaches, each with its *cochero* (coachman) sitting calmly on the box awaiting arrival of a fare. A leisurely trip in one of the old conveyances reveals fine residential sections, gardenlike parks, first-class hotels, a large public market, and expanding industry.

Factories are not new to Ponce. Alcohol distilleries, and plants for the manufacture of rum, candy, crackers, soup paste, buy rum, and hats help furnish employment in this city of 100,000.

Ponce's Self-sufficient Iron Works

Even larger are the interests of the Ferré family, whose Puerto Rico Iron Works, employing 350 men, was established a generation ago.

Luis Ferré, spokesman for the family, takes pride in the economic stability of his workmen, many of whom own their own homes. His record of workers' benefits, retirement plans, safety precautions, and health safeguards parallels that of any modern industrialist on the mainland.

Ferré also takes pride in the self-sufficiency of his plant.

"If we were located in St. Louis, for example," he said, "we would not have to be self-contained. There if any order requiring special work came in, we could subcontract such phases of the job to any one of a half-dozen specialists with plants across the street or down the block. Here we have to do all the work by ourselves, which means we must have many types of machines and equipment."

Jobs under way when I visited the plant included a contract for 22 huge gates for a new power dam, each with 32-foot-long precision hinges of a special hard steel; heavy sugar mill equipment; and a 10,000-ton steel fertilizer lighter to be delivered at the water's edge after a trundle of more than three miles through Ponce streets.

The Ferré family also operates the Ponce Cement Company, employing 200 men; a trucking company; and the Puerto Rico Marine Corporation.

Now their interests have been extended to San Juan with the purchase of the four

government-built plants there (page 426).

One of the Iron Works contracts not long ago called for the steel to be used in erecting a million-dollar baseball park grandstand in Ponce. Puerto Ricans are devoted almost fanatically to the game, known to them as "béisbol." And they have added new expressions to the bright lexicon of the sport.

Bomberos Heroes of Ponce

Ponce takes extreme pride in its firehouse and fire fighters (*bomberos*). The fire department was formed in 1883. A few years later a church fair was held in the town. On ground in the rear of the church was built a fanciful wooden display pavilion, garishly painted in red and black, the city's colors. It was to have been torn down after the fair, but instead the bomberos moved in, equipment and all, and no one has been able to budge them since. It's the biggest tourist attraction in town.

The Bomberos, wearing black patent-leather helmets and red flannel shirts, and carrying swagger sticks, take turns of an evening pacing back and forth in front of the firehouse, impressing all promenaders who pass by. But, with the exception of one or two old pieces kept as antiques, their motorized fire-fighting equipment is strictly modern.

Farther eastward along the coast we came upon the Central Aguirre, third largest sugar mill on the island.

Here, for the first time, we found sugar shipped in bulk. It was being loaded into gondola cars at the mill and carried over a pier to a waiting ship where it was sucked into the hold (page 464).

The great advantage, of course, is in the elimination of the bagging process. Value of such a method under World War II conditions, when jute for sugar bags was unobtainable from India, is obvious.

Hail and Farewell to Middies from Spain

We returned to San Juan in time to see renewed evidence of Puerto Rico's Spanish heritage.

In our absence the *Juan Sebastián Elcano*, Spanish naval training ship, had come into port. The four-masted schooner, named for the man who sailed Magellan's *Victoria* home to Spain in triumph, was manned by 24 officers and 200 sailors. Aboard were 53 Spanish naval cadets.

San Juan had wine and dined their Spanish guests lavishly during their stay. In their spick-and-span white uniforms they were conspicuous at the Casino de Puerto Rico, the



A Few More Turns of the Spit, and This Family Will Dine on Roast Pig

Most of the family are sitting on the ground, and the men are standing. Many a roadside inn is open here, and the family is sitting on the ground, and the men are standing. Many a roadside inn is open here, and the family is sitting on the ground, and the men are standing.

San Juan Beach Club, the Yacht Club, and the others. The time has come for them to say goodbye.

The crowded people crowded the deck to watch as the ship moved out to the harbor. The ship was moving out to the harbor. The ship was moving out to the harbor. The ship was moving out to the harbor. The ship was moving out to the harbor.

Venezuela, New Orleans, Florida, and Texas. Nowhere would she receive a warmer welcome than in San Juan.

Puerto Rico is a part of the United States. Her sons die on the field of battle for Old Glory. But who can doubt that deep sentimental attachment still lingers for the land whose mother tongue most Puerto Ricans speak?

As the ship moved out to the harbor, the family was sitting on the ground, and the men were standing. Many a roadside inn is open here, and the family is sitting on the ground, and the men are standing. Many a roadside inn is open here, and the family is sitting on the ground, and the men are standing.

Portrait of Indochina

By W. ROBERT MORSE AND MAYNARD OWEN WILLIAMS

THE MANY old Asia, war is not new. In the past, it has been more portentous than any since the Mongol hordes overran much of it and galloped westward beyond Moscow.

Now Indochina, like Korea, is a trouble spot. In mist-draped Tonkin mountains, piled against China's southern frontier like craggy peaks portrayed in famous Sang paintings, there is fighting.

Here Annamese underground forces, led by Moscow-trained Ho Chi Minh and bearing arms supplied by Communist China, are carrying on an organized guerrilla campaign against the French and the recognized government of Viet Nam (pages 463, 487).

News dispatches carry such strange-sounding names as Langson, Cao Bang, Louinh, and Luokay, for French troops stationed in Indochina have been forced to abandon outposts guarding the slender mountain passes that stretch like fingers from the flat open palm of the rice-rich Red River delta.

Human Geography in Paintings

The accompanying 16 pages of paintings by Jean Despujols give a geographical and human portrait of this embattled land.

Having won the Indochina Prize for painting, founded by the Economic Council of the Indochina Government, this talented French artist, now an American citizen, spent two years in that country just before World War II. In those two years he produced more than 300 canvases and sketches (page 463).

His oils, water colors, washes, and drawings capture the atmosphere of Indochina's steamy jungle, depict its coiling roads that thread between mirrored paddy fields and rugged cliffs, and portray the tribal mixture of peoples grouped in this section of Southeast Asia, an area little larger than Texas.

To find many of his subjects, he penetrated the least accessible parts of the country. He traveled from the plains of Cambodia, through tumbled hills of Laos, and to Tonkin mountain peaks where perch the isolated villages of gaily dressed hill folk—the Miao, Miao, Lolo, and Thai.

He made friends with tribal chieftains and villagers among the Miao tribes in upland districts on the southern Annamese Cordillera, experienced a coastal typhoon, shot hazardous rapids of the Mekong and Nam Te (Naire), and sweltered in tropical humidity that made the drying of his paintings well-nigh impossible.

In Despujols' scenes no enemy is more formidable than the tiger (pages 470-474). His models reflect Oriental calm, rather than wide-eyed fear. His canvases give the peaceful look of Indochina, now thickened by the shadow of war.

To us, writing these words, Despujols' paintings picture our friends and places we know, for we have roamed Indochina in peacetime and since war came.*

Lissome Women and Dragon-robed Mandarins

To us, exotic Hanoi, Hue, Phnom Penh, Vientiane, Luang Prabang, and Saigon are vivid spots that recall golden-skinned people crowding morning market places, troupeurs, lissome Annamese women and dragon-robed mandarins in long Chinese-style courts, and patient farmers bowed to the good earth beside the Red River and the mighty Mekong.

In some places their homes have been flattened by fighting or by scorched-earth tactics of Ho Chi Minh's followers, the Viet Minh. These places also recall the hospitality of open-hearted Cambodians whose noble Khmer ancestors raised the majestic temples of Angkor, and of friendly Lao printers and craftsmen.

To understand the land and its people, consider first the why of *Indo-China*.

India and China were its cultural parents. Beelha, the massive towers of mysterious Angkor, thrusting in ruin above the jungle near Tonle Sap, or Great Lake, in central Cambodia, hooms the age-old culture of Brahmanism imported from India (page 490).

Brahmans also tutored the Chams, whose brick towers and a mere 100,000 people are all that remain of a once-powerful kingdom in the coastal region that is now part of Annam. Farther north, Chinese culture patterned the court life of Hue.

Mention the word "mandarin" and to most persons it connotes an official of Imperial China. But in its origins the word is Indian Sanskrit and long since traveled north along Indochina's old Mandarin Road, which the French relabeled "Route Coloniale No. 1."

Hindu Brahmins, who sparked the native genius of the early Khmers, and Chinese officials, who lent their culture to the Annamese

* See in the NATIONAL GEOGRAPHIC MAGAZINE: "By Motor Trail Across French Indo-China," by Maynard Owen Williams, October, 1926; "Strife Born Indo-China," October, 1929, and "Along the Old Mandarin Road of Indo-China," August, 1931, both by W. Robert Morse.



Rue Clatinat, Lined with Trees and Shops, Is the Champs Elysees of Paris-flavored Saigon.

The 1902 Saigon Colonial Exposition, which is now being held in the city of Saigon, Vietnam, is the largest and most important exhibition in the city. It is a great opportunity for the city to show its progress and to attract visitors from all over the world. The exposition is held in a large area of the city, and it is a great opportunity for the city to show its progress and to attract visitors from all over the world.



Triple Rows of Bristling Bamboo Fences Protect Quan Lam, a Military Outpost.
Elsewhere back towers mounted by the Chinese Viet Nam troops guard the entrance to the valley. But the Chinese who loot, burn, and kill are not the only ones who have come to this valley.

They were not the only comers here. Indian ancestry also has roots in the Vietnamese. The wind-swept Mekong plain, and the islands of Indonesia as the people tell it, show

it. In a land of rich racial heritage the industrious Annamese have won the dominant place. Viet Nam, reviving its ancient name, meaning "Pearl of the South," endures on a main artery of Tonkin, Annam, and Cochinchina, with the eastern seaboard coast. In 1954, still mentioned by some as some 22,000,000 people.

The Kingdoms of Cambodia and Laos, which occupy the western inland half of the country, have a combined population of only a few more than 5,000,000 people. They have remained relatively peaceful and govern themselves. But recently there is talk that they, too, must be "liberated."

The Laotians and their more primitive tribal cousins scattered throughout the val-

leys of northern Tonkin show how old Asia's peoples have shifted. They are members of the extensive Thai (Tali) race, to which also belong the Siamese and the Shans of Burma.

Centuries ago they dwelt in the southern region of China before it had become Chinese. Many are still there. Persistent pressure, and the sweep of Kublai Khan's armies, with whom Marco Polo was the only European "war correspondent," broke up their organized kingdoms and led their southern migration.

A Land of Hillside Homes

Other tribes have moved over these same hills and valleys.

The Vietnamese, who followed the Han and northern Chinese to Tonkin, found their neighbors already occupying the val-

leys. The Chinese, who followed the Han and northern Chinese to Tonkin, found their neighbors already occupying the valleys. The Chinese, who followed the Han and northern Chinese to Tonkin, found their neighbors already occupying the valleys.



National Museum of Ethnology, Washington, D.C.

Costumes Rather than Faces Identify the Tonkin Hill Tribes

Indochinese people are known as allpayers, but each girl normally wears a distinctive costume. The White Men (left) wears called hat and a long tunic. The Black Men (middle) wears a hat like but appears ready to take off his hat and tunic. The Man (right) wears tunic, and a long tunic, and a hat. The Man (right) wears tunic, and a long tunic, and a hat.

and so they set up their houses on the hill tops. The Man of the Hill tribe have come since settled on the higher slopes of the mountains. Indochinese people have thus become a study in vertical pyramiding as well as one of horizontal expansion.

We entered the hills and found the people who had climbed into the hills. Hill-tribe men often wear the dress of the plains people. But not so the women. So we could not tell the tribe by the costume but only by the face. One of the first things I saw to recognize a tribe.

The Man of the Hill tribe is a black man and

has elaborate head gear, well-polished jewelry, and his costume is more elaborate. His skirt-flare is more pronounced. He is confused with her Man of the Hill cousin who prefers checkerboard-patterned trousers, bright red pompons on her blouse and a multicolored tur-

Inside them the Man of the Hill tribe is a black man and has elaborate head gear, well-polished jewelry, and his costume is more elaborate. His skirt-flare is more pronounced. He is confused with her Man of the Hill cousin who prefers checkerboard-patterned trousers, bright red pompons on her blouse and a multicolored tur-

Even the Man are divided into several groups, the Black, White, Red, and Flower. According to the legend of the tribe, the women wear a white tunic. The Man of the Hill tribe is a black man and has elaborate head gear, well-polished jewelry, and his costume is more elaborate. His skirt-flare is more pronounced. He is confused with her Man of the Hill cousin who prefers checkerboard-patterned trousers, bright red pompons on her blouse and a multicolored tur-

The Man of the Hill tribe is a black man and has elaborate head gear, well-polished jewelry, and his costume is more elaborate. His skirt-flare is more pronounced. He is confused with her Man of the Hill cousin who prefers checkerboard-patterned trousers, bright red pompons on her blouse and a multicolored tur-

'Man' means "Barbarian" in Chinese or "Savage" in Vietnamese. A more accurate name for the tribe is Kham-tien, meaning "Mountaineers." Among these Man tribes are the Man of the "Horns" (Man-Cor), the Man of the "Chinese Money" (Man-Tien); and also of the "Large Money" (Man-Tien-Tien), the "High Villages," the "Ferocious Man," and several others.

The White Thai and Black Thai

White Thai sounds more formal than Black Thai, but the opposite is the case. The Black



The Artist in His Studio, Checks a French Shipwreck, His Precious Indochina Paintings

Jean Langlois produced some of his works in Indochina. He took them to his native France just as World War II ended. He had become an American citizen. Here, in 1948, his collection arrived in Shreveport, Louisiana. These pictures, including the tiger hunt, are reproduced on pages 467, 474, 479.

That set down their language with ink stick and brush. They cherish their feudal loyalties and are less in favor of being Vietnamized than the White. Desjardis' paintings of the Black and White Thai reveal that they are sisters, save for the difference in color of the houses (page 481).

It has been estimated that three-fourths of upland Tonkin is inhabited by the Thai, for here, in addition to the Black and White Thai, are the Tho, Nung (Ghai), Nhang, and numerous other members of that race.

Since trouble has brewed in these Tonkin hills, many of these groups have banded together into a Thai Federation, under the leadership of a hereditary prince, and have indicated that they will resist any incursion and occupation of their lands.

Against machine guns and mortars, hand-forged guns and crossbows are of little avail, but mountaineers have a stubborn tradition of freedom.

In isolated tribal villages the people live at home and till their crops of maize, buckwheat, potatoes, and sometimes opium poppies in forest slashings. Some of their crude huts are built on stilts on the hillsides; others rest on earthen floors.

The people are shy but hospitable. One of us remembers the friendly gesture of being presented two eggs by a Miao village headman; in his tiny village eggs were scarce.

It must be admitted that photographing the timid, easily dressed womenfolk or seeing Miao men crouching in dervishlike whorls to plaintive tunes of bamboo-piped *lam* is more pleasant than spending nights in smoky houses where jags often wander at will. Hill villages, lively from a distance, can be incredibly dirty.

High light of Williams's experience with these tribal folk came one day when he had his men up to Nguyenbinh and Thanhha.

Hundreds of hill villagers had come down to town, many dressed in their festival best. Before his cameras they stood with reluctant feet and downcast face, for despite their eye-arresting costumes the young mountain maidens were bashful.

Among themselves, however, the tribal folk could be gay. Young men and girls, playing a game that seemed a combination of David's sling and archery, lunged and shouted with uninhibited joy. Teamed in pairs, they took turns in hurling long-tailed weights at a high paper target, and were not content until they had riddled it. If a thrower missed the target the partner tried to catch the projectile by the tail before it touched the ground.

It was a chance for the youths to show off.

Actually, the girls were just as skilled in hand-and-feetness. In the excitement of the game, these tight-lipped, tight-tongued girls showed Olympian power and grace and revealed a gay camaraderie.

Checker "Board" Where Girls Are "Men"

A game of checkers, played between the Man-Che and Man-Tien, was novel. The "board" was a rice terrace, marked in squares by long strips of split bamboo. Pompon- and silver-ornamented girls were the "men."

They progressed, from square to square in accordance with the moves of the master players, who sat under a tide shelter near by. When a man-girl was won, she left the board and joined the spectators.

Simple pleasures, yes. But here was gay recreation for a people who toiled in hill fields by day.

Market day in quiet towns assumes a county-fair atmosphere, with gambling games and performances of Annamese actors serving in lieu of a midway. With fine feathers and soft silks, nondescript villagers become fine birds, in fact. And their orchestras, at least, are loud.

It is a journey that finds no measure in miles to come back from the hill villages or rural towns to attend a cocktail party or a tea dance in Hanoi, itself divided into a well-built European city and a native town where wrinkled flower girls spread a garden of blossoms along the shore of an urban lake. This once-peaceful capital has been little damaged by war.

It is something else again to motor over the countryside around Hanoi and see roads guarded by armed troops, and to visit the villages and towns that have been so wrecked that hardly one brick rests atop another.

The Viet Minh's soldiers forced the villagers to tear down their own houses when they retreated before the French two years ago, then often ordered the bricks and timbers carried away. In some towns, abandoned in haste, water towers and the main public buildings were blasted to prevent their being used by the French.

It has been said that the force which controls the rich rice plains of Tonkin and Cochinchina controls all Viet Nam. As we write, most of both areas are under control of the French and Viet Nam troops, save for sniping, incendiarism, and night raids.

One sees few smiles on the faces of the peasants whose towns were wrecked, and whose water buffaloes were slaughtered for food by the Japanese during World War II or have since been taken by the Viet Minh.



Radha - Represents the Dances of the Apsarases - Glorious Girls of the Hindu Deities

The painting is a full-length portrait of a Hindu deity, likely Radha, standing and holding a lotus flower. She is adorned with a yellow sari and a red shawl, and has a garland of flowers around her neck. The background is dark and indistinct.

The painting is a full-length portrait of a Hindu deity, likely Radha, standing and holding a lotus flower. She is adorned with a yellow sari and a red shawl, and has a garland of flowers around her neck. The background is dark and indistinct.

The painting is a full-length portrait of a Hindu deity, likely Radha, standing and holding a lotus flower. She is adorned with a yellow sari and a red shawl, and has a garland of flowers around her neck. The background is dark and indistinct.



It is known that the \mathcal{H}_2 norm of a system is the square root of the trace of the controllability Gramian. In this paper, we consider the problem of minimizing the \mathcal{H}_2 norm of a system subject to a linear matrix inequality (LMI) constraint. This problem is solved by using the LMI toolbox in MATLAB. The results are compared with those obtained by using the standard method of minimizing the \mathcal{H}_2 norm.



For these, with the White and Clark Vectors in hand, we made the choice of using



The Girls Are There, the Tiger Holds Court at Her Temple. But Did Not Pass, but His Room, Set the Artist Posing



Young women in traditional dress, Kachin, India, 1900s

The photograph on the left shows a young woman in a traditional Kachin dress, which is a long, flowing garment with a wide, patterned sash. The photograph on the right shows a young woman in a traditional Kachin dress, which is a long, flowing garment with a wide, patterned sash.



A Cremation Pyre's Kite-like Banners Sing in the Breeze Like Aeolian Harps

This qire, pavilion, seen at Siemreap, shelters the body and parts of a Buddhist priest. That it is of inflammable bamboo and paper. It will not be given to the flames but will be burned.

The pyre is built on a raised platform of bamboo and is surrounded by a low wall. The body of the deceased is placed in a small boat on a bier and is carried to the pyre. The pyre is then set on fire and the body is cremated. The ashes are then collected and placed in a small jar. The pyre is then dismantled and the materials are recycled. Most of the men serve in the army.



Children Play in Mission Wells Sweeping by Gate of State

The children of the mission are playing in the wells, which are the only ones of the kind in the state. The children are playing in the wells, which are the only ones of the kind in the state. The children are playing in the wells, which are the only ones of the kind in the state.

The children are playing in the wells, which are the only ones of the kind in the state. The children are playing in the wells, which are the only ones of the kind in the state. The children are playing in the wells, which are the only ones of the kind in the state.



Radjé Tribesmen, Ceylon. "Hear, ye Mankillers, Clank, a Tiger and Spears and Crossbows. His Name Is Rajan."





Chinese Mountains of the Hills of the "Blackbone" River. Mounted from the Fields

Chinese Mountains of the Hills of the "Blackbone" River. Mounted from the Fields



Delicate Armoire and Mirror Combined Reflect the Contrast Between Vic Nam's Racial Contrasts

A young woman with dark hair, wearing a white, high-collared dress with a dark belt, looking slightly to the right. The background is a plain, light-colored wall.



Delicate Armoire and Mirror Combined Reflect the Contrast Between Vic Nam's Racial Contrasts

A young woman with dark hair, wearing a red, high-collared dress, looking directly at the camera. The background is a plain, light-colored wall.

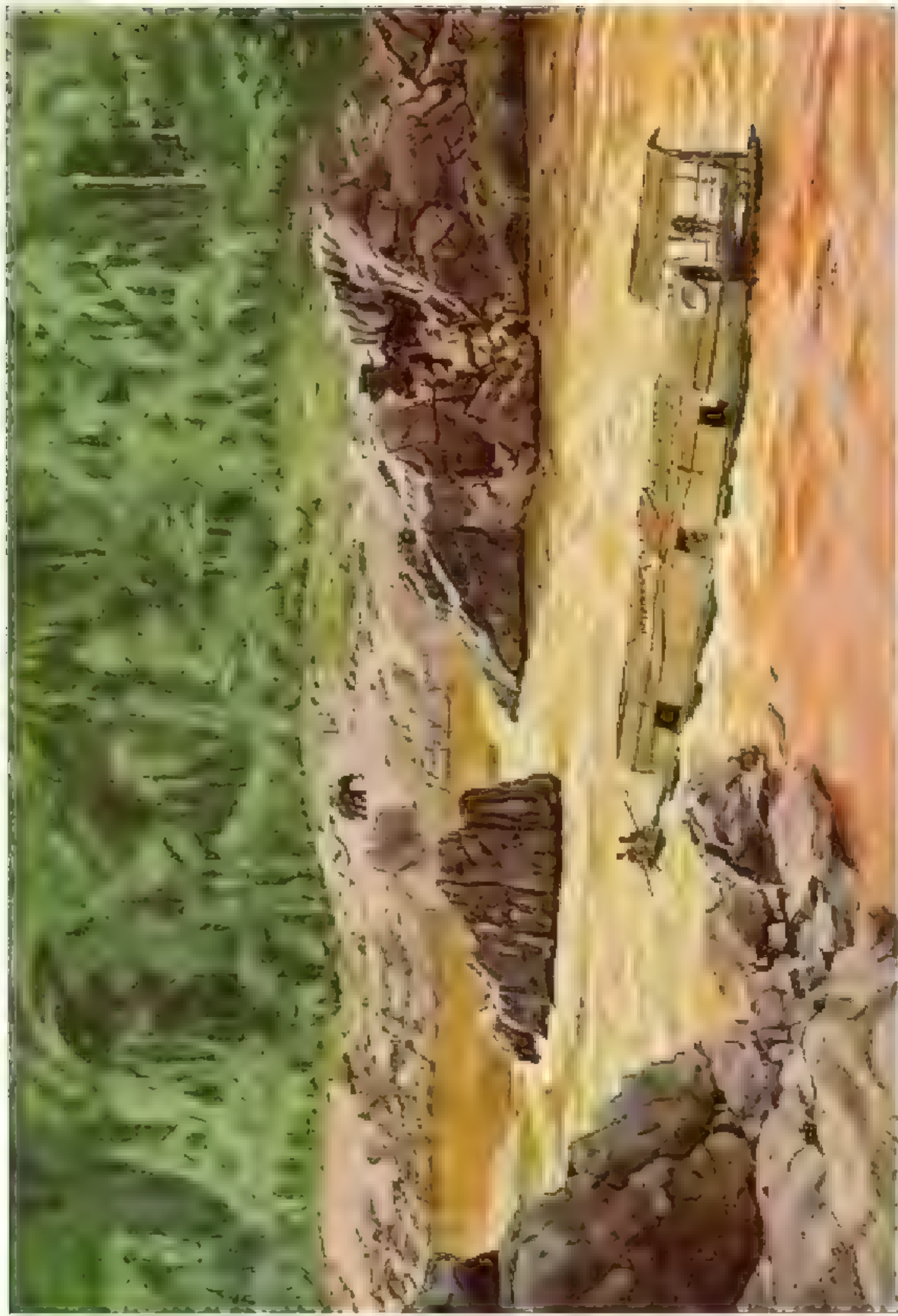


Fig. 1. A view of the Nelson's House in a New York Point State. The house is built on rocks exposed by low water.



Young Lady and Young Master Reminded the Artist of Princess and Madonna

Young Lady and Young Master Reminded the Artist of Princess and Madonna



View from the river looking up the valley. The river is the 'Yellow River' and the mountains are the 'Yellow Mountains'.



These robes are called White Turbans which are worn by the women of the tribe.



These robes are called White Turbans which are worn by the women of the tribe. The women of the tribe are very beautiful and are very kind and hospitable.



Tenby's Road to Red Creek. Bears No Signs of Chinilla War's Winter Battles.
 The mountain side is a garden in this season and bears no signs of the war. They had
 been used for the purpose, meeting only in the winter months of the high place.

forces. But today, as always, farmers' backs are bent to their muddy rice plots, whose grain barely feeds all the mouths of the country.

Paintings Reveal Racial Differences

Although Viet Nam lies entirely within the equatorial zone, its northern end almost touches the Tropic of Cancer. Its "winter" season is edged with raw coolness. Despujols' paintings on page 477 reveal how this colder climate is reflected in the peoples' physique, for the folk in Tonkin are more sturdily than those farther south where Viet Nam sprawls deep into the hot Tropics.

But there is more difference between Despujols' broad-faced Xian of Tonkin and her more delicately boned sister from near Hue than just climate. Part is due to generations of breeding in the old courts of Annam.

In peace years, when we drove along the Mandarin Road with no fear of ambush, we were struck by the contrast of the peoples on the opposite sides of the Annam Gate, that sharp mountain spur which tears across the way, midway between Hanoi and Hue.

By topping its crest, where stands a monument that once marked the division between Tonkin and Annam, one leaves behind most of the stocky, broad-checked Tonkinese, whose women wear muddy-colored brown skirts and flat, cartwheel-size hats.

Now heard are the slender Annamese, clad in trousers and long, closely fitting tunics. Here also are conical hats, but they are shaped like broad mushrooms, rather than flat 5-inch deep inverted tea trays.

Hue itself means "Concord," and for long years it seemed a singularly appropriate name. Amid its hoary, Chinese-fashioned palaces on the flower-scented River of Perfume, life seemed static and assured.

When Oriental odors rise on sticky heat waves, "River of Perfume" seems a euphemism. But Hue's perfume is not so much scent as sense of historical attraction.

No farsighted town planner, seeking trade routes or industries, chose the city site. That was done by geomancers, seeking escape from evil spirits. As in faraway Peking, to which Hue often sent tribute, three concentric wall-aded protection to the capital, the Royal Town, and the Purple Forbidden City. But walls have not protected dreams—or hopes—several of the palace buildings have recently been burned and their treasures lost.

Before the French began to transfer political power to Viet Nam authorities, Emperor Bao Dai (Circumstance Sustained) was the hereditary monarch here. Now he has

become the Chief of State of Viet Nam. And with this political change have gone many of Hue's dreams, which relied on proud ancestry and carved their "Who's Who" on memorial stone tablets.

If Hue's walls and Temple of Heaven suggest Imperial Peking, so its mausoleums suggest the Ming tombs of China at the end of their statue-lined avenue. Until recently, royalty in Annam had carried on traditions which ended in China with the fall of the Manchus in 1912.

An aviator, flying above Hue's Tomb of Filial Piety, might see flower beds which form the character two—Eternity. Over the near-by mound the National Geographic Society colors would be appropriate. The Blue Heaven, Brown Earth, and Green Water stand for the Three Powers to whom all Annamese bowed.

In March, 1942, Bao Dai celebrated the last triennial sacrifice to the Supreme Being. March, 1951, again would have been the time for this greatest act of Annamese worship, and not political forces caused its abandonment, as in China.

Sampan Life in Hue

On Hue's quiet plant-choked waterways sampan life seems idyllic. In these craft bare-legged boatmen, standing in the shadow of can be-souffler headgear, face forward as they swing the oar. It must be a hard life, but as the yellow-oiled craft glides through sweaty mist or sun-dappled shadow one feels as if some hidden director were arranging "local color" for its picturesque beauty.

From Quangtri, a few miles northwest of Hue, a good road handles the green mountain backbone between the South China Sea and the Mekong Valley, which divides Annam from Laos. Traveling over it one day, Williams was met at Savannakhet by a gay-colored reception committee of girls, bearing sweet-smelling flowers and waiting to enact such a love court scene as delights Laotian youth (page 485).

While the rainbow-scarfed girls paid respectful attention, five Laotian chiefs in solemn ceremony tied a strand of cotton cords around his wrist as a good-will symbol to ensure safe flight to Europe and a happy homecoming to Washington.

In Paris, a few days later, it seemed as if people there were as superstitious as in Laos. Noting this simple cotton cord around Williams's wrist, a young Parisienne asked if she might touch it. Within minutes a dozen others had asked to do the same. One person even ordered champagne!



Subsided Pellets, Holding Offspring in Upland Hares, Choose the Best of the Bad
 (1999), <http://www.sciencemag.org/cgi/content/full/284/5411/1161>



The New River Forest, showing the variety of trees and the dense canopy.

The New River Forest is a large area of woodland, covering a significant portion of the region. It is home to a wide range of plant and animal life, and is a popular destination for visitors looking to enjoy the outdoors. The forest is managed by the Forestry Commission, and is open to the public for recreation and education.



Final Review Meeting, Monday, 17 July, 1966, 10:00 AM, Room 100, University of Toronto

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525



Prince Engages Demon in a Dance-dual Beside Anchor's Stowed Walls

Legend has it that the prince, who was a great warrior, was once engaged in a dance-dual with a demon. The demon was a great warrior, and the prince was a great warrior. The demon was a great warrior, and the prince was a great warrior.

Legend has it that the prince, who was a great warrior, was once engaged in a dance-dual with a demon. The demon was a great warrior, and the prince was a great warrior. The demon was a great warrior, and the prince was a great warrior.

This latter with those who were hills and grass, and the loads of the Armenian church, which were full of the Indolence, and the loads of the church, which were full of the Indolence, and the loads of the church, which were full of the Indolence.

Unlike the other side of the world, these people are free to live. Unlike the other side of the world, these people are free to live.

Legend has it that the prince, who was a great warrior, was once engaged in a dance-dual with a demon. The demon was a great warrior, and the prince was a great warrior. The demon was a great warrior, and the prince was a great warrior.

His traits and in his own village, he was a great warrior, and the prince was a great warrior. The demon was a great warrior, and the prince was a great warrior. The demon was a great warrior, and the prince was a great warrior.

There were a great many and there were a great many, and there were a great many, and there were a great many, and there were a great many, and there were a great many.

related household is often dwell under one roof.

Most conspicuous in the interiors, which are almost devoid of furniture, are the rows of rice-wine jars ranged against the walls. As in other tribal houses, there are no chimneys, but the sooty smoke that eventually seeps through the thatch has the advantage of serving as a mosquito repellent.

Among the Rade and Jarai, who are the most numerous and highly developed of these Mol tribes, women's rights are not in question. For here a matriarchate prevails, both property and name being transmitted through the mother.

Because there are usually more men than women in the tribe, brides also are in good position to bargain.

Rigid Rules for Matchmaking

The first step in any matchmaking must begin with the young man's parents. When paying a first call, they bring a gift of betel, the gesture being popularly known as the "visit with the little gift of betel to the little garden gate." If favorably received by the girl's parents, then a second and more elaborate gift is offered. It usually includes chickens and rice as well as betel.

If all progresses smoothly, the young man may find himself combining wooding with working in the house of the bride's parents to pay the cost for her hand.

In some Pacific island is complex "love scars" on each other's arms; here tribal boys scratch each other's faces as a seal or signature of the marriage contract!

Although essentially agriculturalists, many of the Mol men are excellent hunters and trackers of big game, which abounds in the region. The Muong particularly, who live to the west of Thanhthuat, are famed as elephant hunters. Capturing and domesticating young elephants affords a major source of income.

Dalat, pleasant hill resort station for sophisticated Saigon, lies on these hills where near-nude Rade trek the paths, totting cross-bows and baskets of produce. Emperor Bao Dai spends much of his time here at Dalat rather than in Saigon, the capital. He and other officials commute by plane.

A few months ago one of us was also glad to have taken a plane, for a motor convoy traveling between Saigon and the hill station was ambushed and more than half of the vehicles destroyed.

Gay Parisian-flavored Saigon of a few years ago isn't quite so gay now. Even though grenades are sometimes tossed into its open-front cafes and theaters, it still maintains a good measure of calm (page 462).

Last spring, when Moore was there, the rigid night curfew had been lifted. Casinos and casinos in the adjacent Chinese city of Cholon again shimmered with soft silks, and the excited hum of voices rose above the monotonous call of the croupier.

One night, though mortars still boomed in the river marshes at the edge of the city, he attended a gala celebration at the Cercle Hippique, where frothily gowned Frenchwomen and their immaculately dressed escorts watched cavalry officers and other horsemen give a spirited exhibition of barrel jumping.

Next day there was a memorial feast of the Dead, held by Viet Nam officials at the temple and tomb of Le van Duyet, the famed general under Emperor Gia-Long who held Annam's jade scepter a century ago. Sacrifices of a bullock, goat, pig, and heaped trays of rice and fruits had been placed before the altar (page 484).

To a long wailing chant punctuated by drums, flageolet, and thin stringed instrument, temple officials in long blue and purple robes, upturned-toed felt shoes, and square hats lighted candles and incense and bowed over offerings of tea and alcohol.

Motor northwestward from Saigon to Phnom Penh, and the face of Indochina again changes. On roads and in hamlet villages marked by slender temple spires you see dark brown-skinned men and women, their hair cut in a short brush and both wearing as a lower garment the *crampet*, a cloth wrapped around the body and caught up lapwise between the legs.

Among them, too, are numerous shaven-headed Buddhist priests in yellow togalike robes. These are the Cambodians, whose Khmer ancestors once dominated much of the southeast corner of Asia (page 471).

Today 24-year-old King Norodon Sihanouk rules over some 3,500,000 of these friendly, hospitable folk. His palace in the center of the trim city of Phnom Penh, by an odd twist of history, appears of the same pattern as those in Bangkok, Thailand.

Centuries ago the Khmers controlled much of Thailand, or Siam, but that, as also the fabulous Khmer capital of Angkor, fell to the Thai, who had migrated from the north.

Victorious Thai monarchs adopted many Khmer court customs, because, to them, the Khmer etiquette represented culture. The Cambodians, in turn, have adopted some things Siamese as their country has reasserted itself. Both countries share the influence of the southern form of Buddhism, the Hinayana or Little Vehicle, sect, which has replaced their earlier worship of Hindu gods.

The heart of Cambodia is a broad spreading plain, bare and burned in the latter part of the six-months' dry season, but lush green with rice fields when daily rains come in May or June. In Phnom Penh Annamese and Chinese are the chief shopkeepers; the Cambodians are the officials and people of the soil.

Lacelike Carvings Defy Jungle

Both of us have been in Phnom Penh during the April New Year, when the capital city has been in festival mood. But somehow the classic dances and holiday temple pilgrimages seem best when viewed against the background of high rise Angkor, whose stone towers and lacelike carvings still defy the onslaughts of the jungle, their battle fortunately assisted by clearing operations and skillful reconstruction by the French.

There, during daytime, we have watched pilgrims lighting incense in the echoing courts and caressing the stone reliefs to lustrous marble smoothness. There, when tropic night brings jungle peace, we have feasted our eyes on a spectacle too dimly lighted for lens, but which Despujol has transferred to canvas.

Across the luscious-lugged moat, yellow flares pinpoint a darkness in which the five tall towers of Angkor Wat seem more ghostly than the stars.

Walking over the huge, uneven causeway, a towering form lumbers past. One of the temple elephants is about to add his colorless bulk to the glitter of gold costumes, reflecting yellow torch-flare under a velvet sky.

Behind a troupe of dancers, on mountainous mounds of storied stone, are carved lively Apasaras whose postures now are matched by living leg and arm. The chalk-faced dancing girls, chattering in offstage confusion a few moments before, assume such plastic poses as nameless sculptors had created in formless rock before Marco Polo saw other marvels in Asia, but failed to see these.

Dancing Girls of Angkor

At Sabrata or Syracuse, living actors bring brief new life to the time-bleached bones of ruined theaters. But at Angkor, in the tropical darkness, both massive stone and living dancing girls seem ethereal (pages 467, 469, 471, 484).

Compared with warring elephants in bas-relief, our pachyderms appeared lifeless, for they came to pieces into battle. And the Apasaras, with round breasts and enigmatic smiles that the sculptors had coaxed from unyielding stone. Yet here it was almost as if the

Khmers again had awakened from the dust of centuries.

The walled city of Angkor Thom, known in its day as Yaçodharapura, once held a million people. The people have gone, and so have their houses. But here still stand the five city gates, the large central Bayon temple, and outlying monasteries upon whose towers smile the four faces of the Lokesvara (Avalokitesvara), which also represent a stylized portrait of King Jayavarman VII, the great warrior-builder king of the late 1100's.

Other kings before him also studded the country with richly carved shrines which, even in the jungle's green gap, emphasize the glory to which the Khmers had risen before Europe launched its Crusades or Genghis Khan had come to power.

Laos Has Two Capitals

Northward, across the big bulge of eastern Thailand, partially outlined by the Mekong, is Vientiane, capital of Laos. Government in Laos is a problem, since the ministers meet in Vientiane, while the King and his court reside at Luang Prabang farther upriver.

For the ministers to get from Vientiane to Luang Prabang to confer with the King requires some 12 days by one of the motorized pirogues that ply the winding river. In the dry season, however, one can traverse the distance by rail or fly there in an hour—if the fogs haven't hidden its hill-girt air-strip.

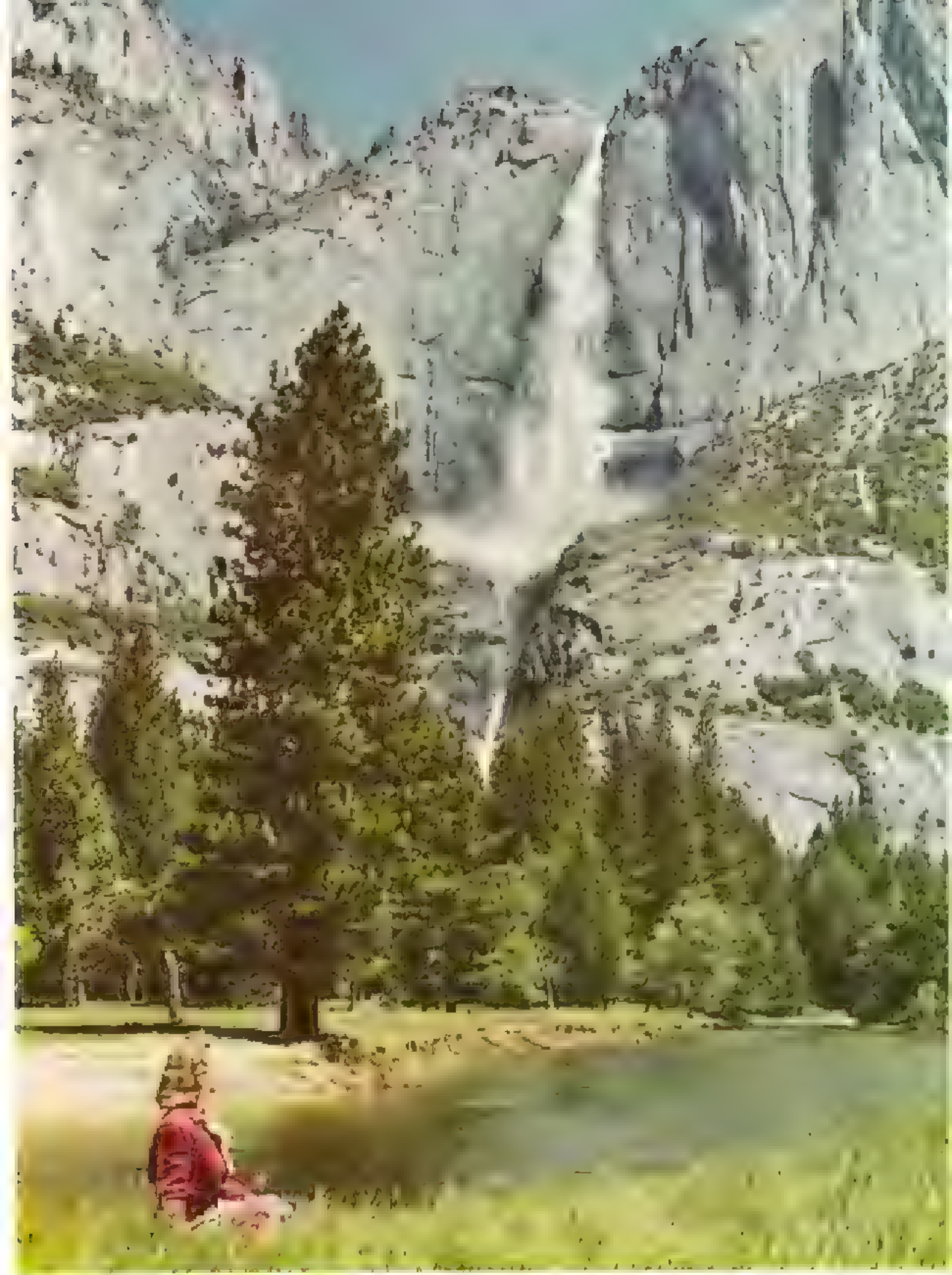
Fortunately, when we went, the hills were clear. Expertly the pilot circled the sharp pagoda-crowned hill in the center of town and glided down to the short landing field.

Both Vientiane and Luang Prabang are quiet temple towns, and the people seem to enjoy idyllic lives, wanting little beyond that provided by a beautiful Nature. Certainly, smiles and hospitality are accurate evidence, then the Laotians are happy.

Biggest traffic block Luang Prabang knows is when the palace elephants march to the river to take their daily baths or pause before a temple to be fed bundles of grass and have incantations whispered in their ears.

Having lived in Thailand for a number of years, Moore felt almost at home, for the Buddhist temples, folk dances, dress, and the language of these people are almost identical with those of northern Siam. At times, in earlier days, Laos sent small tribute trees of gold and silver to the Bangkok court.

In the piled mountains north of Luang Prabang are numerous hill dwellers who have migrated there, seeking peace. But today Laos anxiously watches this northern frontier against less peaceful invasion.



Yosemite's *Scenic Views* is a collection of 100 of the most beautiful views in the park, including the world-famous Half Dome, El Capitan, and the Yosemite Falls. The book is a beautiful addition to any Yosemite collection and is available in paperback for \$14.95.



Millions of people gathered in the city of London, England, to see the Queen and the Duke of Edinburgh on their wedding tour.

The photograph shows a large crowd of people gathered in a park-like setting. The crowd is dense and fills the foreground and middle ground. In the background, there are trees and a building. The overall scene suggests a significant public event or gathering.

A Circle of Friends, a Bazinga! Prouphave—the Perfect Spot for Wix Stars

Prouphave is a place where the stars of the Wix universe can come together and share their experiences. It's a place where they can learn from each other and grow together. It's a place where they can find the support they need to succeed. It's a place where they can be themselves and shine.





Massive Glacial Sculptures Emerge From Ice Valley's Pines & Poppy Wilderness

Wanda Mae Postman Accepts a Succulent

Wanda Mae Postman, a member of the Garden Club, is shown here accepting a succulent from a friend.



Silver Rose Yields a Hundred Hundred

Silver Rose Yields a Hundred Hundred, a photograph of a woman holding a large bouquet of flowers.





A Mythical Indian, Turned to Stone, Forms Her Own Monument. Miles-high Hall Dance
 ended with the cliff's dark streaks and rocks that for a while caught during her husband. But I have seen
 the cliff's dark streaks and rocks that for a while caught during her husband. But I have seen

Holy Week and the Fair in Sevilla

By LUIS MARDEN

With Illustrations from Photographs by the Author

ROMAN clerics, in black robes and red-crested helmets sat at a leaf-walk café tables eating ham sandwiches and drinking beer.

Under street lamps masked penitents, like sinister figures of the Inquisition in their long gowns and high, pointed hoods, conversed in whispers (pages 504 and 507).

Troops of cavalry in brilliant full dress, with drawn sabers held stiffly upright, clattered over the cobble as muffled drums thudded monotonously and a bugle blared bravely in the still air.

It was midnight. Holy Week had begun in Sevilla.

A Week of Processions

I had driven down from the bleak Castilian highlands to the spiritual capital of Spain's sunny southern region of Andalusia* to see striking demonstrations of two aspects of the Spanish character: piety and gayety. The first reaches its fullest expression during the impressive Holy Week processions; the second shows itself at the Spring Fair that follows.

Sevilla's Easter week processions begin on Palm Sunday and continue through Good Friday. Day and night, at least one procession will be making its way round the city. Pilgrims become used to the solemn beat of muffled drums and the lugubrious notes of the bugle.

Forty-eight *cofrades*, religious brotherhoods of laymen, have charge of the *Semana Santa* (Holy Week) processions. Oldest of the brotherhoods dates from the 14th century, several from the 15th. They bear sonorous titles such as:

"The Pontifical, Royal and Very Illustrious Brotherhood and Cofradia of Nazarenos of the Sacred Decree of the Most Holy Trinity, Most Holy Christ of the Five Wounds, Most Holy Mary of the Conception, and Our Lady of Hope."

The *cofrades*, or brothers, usually file in absolute silence, wearing voluminous tunics and tall conical hoods (page 514). Originally the loose robes and masks, different in color for each brotherhood, hid the identity of the penitent, so that no one could recognize the sinner. Penitents are also called *nazarenos*,

probably because some early Christians were known as Nazarenes. No women march formally in the processions.

Most *cofrades* carry two *pasos*, or platforms bearing images, in procession. The first shows an episode of Christ's Passion, and the second canopied platform bears the sorrowing Virgin Mary (page 508).

The *pasos* of Sevilla are famed for the rich ornamentation of the dais and the images. Most elaborate of any in Spain, they are made of carved and gilded wood. The Virgin's *paso* is surmounted by a richly worked velvet canopy, or *balдахin*. Twenty to forty men, hidden by the fretwork sides and velvet curtains of the *paso*, carry the heavy platform through the streets (page 503).

I stood one night among a throng of Spaniards and fervent pilgrims from all over the Spanish-speaking world in a park on the edge of Sevilla. As the beat of drums heralded the approach of a procession, street lights snapped off, leaving the night to a brilliant moon.

Along a sandy path that ran under a high wall a double line of hooded penitents shuffled into sight. Flames of the four-foot candles they carried threw wavering circles of yellow light on the moonlit wall.

Though thousands packed the line of march, the only sounds came from the drums and the shuffling of sandaled feet. As I looked down the two lines of flickering light, the square back of a *paso* bearing the figure of Christ Carrying the Cross, turned the corner. Glass-shaded rancid lanterns at the corners of the *paso* threw a sinful glare on the agonized face of the Saviour, and made the varnish of the wood carving glisten like sweat.

The Haunting Song of Repentance

As the ponderous dais approached, the clear voice of a woman rang out from somewhere in the crowd at my back. In long drawn-out minor notes, modulated by the vibration of the Moors, the woman sang to the image.

It was the *saeta*, a song of repentance and sorrow aimed like an arrow at the bowed figure on the platform. At the first notes, the invisible bearers came to a halt and lowered the heavy *paso* to the ground, fading the voice issuing from the darkness. For a couple of minutes the *saeta* continued, then died away on a long-drawn wail. The drums beat again, the platform shuddered into life, and the pro-

* See "In Andalusia, Home of Song and Sunshine," 14 Ill. in color by Gervais Coudenhove, NATIONAL GEOGRAPHIC MAGAZINE, March, 1929.



Heart and Voice of Seville the Giralda Bell Tower

The tower of the Giralda, the bell tower of Seville, is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville.

The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville.

The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville.

could be heard from
several miles.

When the bells were rung, the people of Seville would come out to the square and stand in front of the tower. The bells would ring for an hour, and the people would listen to the sound of the bells. The bells would ring for an hour, and the people would listen to the sound of the bells. The bells would ring for an hour, and the people would listen to the sound of the bells.

Paternal Tears of Sorrowing Mary

The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville.

The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda is a masterpiece of architecture. It is a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville.

When the tower of the Giralda was built, it was a masterpiece of architecture. It was a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda was built by the people of Seville, and it was a masterpiece of architecture. It was a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda was built by the people of Seville, and it was a masterpiece of architecture. It was a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville.

The tower of the Giralda was built by the people of Seville, and it was a masterpiece of architecture. It was a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville. The tower of the Giralda was built by the people of Seville, and it was a masterpiece of architecture. It was a tower of the heart and voice of Seville, a tower of the soul and spirit of Seville.



Spanish Bullfight and American Movie Accepted Side by Side

Madrid, Spain, April 10.—The Spanish people are not only fond of bullfights, but they are also fond of the American movie. No matter what the time of day, the streets of Madrid are filled with people who are watching the American movie. The American movie is accepted side by side with the Spanish bullfight.

Four leads like horses are used to hold up the picture. The picture is held up by the four leads. The picture is held up by the four leads. The picture is held up by the four leads. The picture is held up by the four leads.

After a few minutes' rest, the picture is held up by the four leads. The picture is held up by the four leads. The picture is held up by the four leads. The picture is held up by the four leads. The picture is held up by the four leads.

The director is called in to see the picture. The director is called in to see the picture. The director is called in to see the picture. The director is called in to see the picture. The director is called in to see the picture.

and wonder that for the first time in the history of the world.

Immediately behind the picture is the American movie. The American movie is held up by the four leads. The American movie is held up by the four leads. The American movie is held up by the four leads. The American movie is held up by the four leads.

The movie is held up by the four leads. The movie is held up by the four leads. The movie is held up by the four leads. The movie is held up by the four leads. The movie is held up by the four leads.



Pale Moonlight and Brilliant Candles Illuminate the Virgin of Candalaria at Midnight

Scattered here and there, some distance from the main part of the town, are a few small groups of houses and a few churches. The most prominent of these is the Virgin of Candalaria, which is a very large and ornate building. It is a very old building, and its architecture is very beautiful. The building is made of stone and has a very large dome. The dome is covered with tiles and is very ornate. The building is surrounded by a high wall and a moat. The building is very well lit up at night. The lights are very bright and create a very dramatic effect. The building is a very important part of the town and is a very beautiful sight to see.

hyperbole, grace, and romanticism that other Spaniards expect of the Andalusians flower best in Sevilla.

"Salty" Shop Signs

A Spaniard pays you a high compliment when he says you have salt; that is, wit, grace, spirit. Sevillanos are salty talkers, and their ready wit extends even to shop signs. One sign I saw read:

"Purveyors of Languages, Talent, and Vertue!"

It hung over a pork-butcher's shop that specialized in pig tongues, brains, and hearts.

In another street a cabinetmaker's shingle said:

"We Make Furniture and Sonnets."

Once chicken thieves robbed a henhouse on the grounds of a rural police station outside Sevilla. They took every hen, leaving only the disconsolate cock. Next morning the police found the dejected rooster perched alone in a corner. Round his neck hung a placard that read:

The Ladies of this Don
To Sevilla are gone.

Incidentally, Spanish, because of its paucity of technical terms, is a poor language in which to describe machinery, but an excellent tongue in which to navigate or to make love.

The Moors have left their stamp on Sevilla in streets so narrow that pedestrians can stretch out their arms and touch both walls at the same time (page 524), and in white, massive-walled houses built around courtyards bright with flowers and pleasant with the sound of running fountains.*

Giralda Symbol of Sevilla

Over the low roofs of the city the slender tower of the Giralda points a terra-cotta-colored finger into the blue Andalusian sky (pages 500, 507, and 521). As much a symbol of Sevilla as the Eiffel Tower is of Paris, the Giralda holds a special place in the hearts of the sevillanos. Homesick Andalusians in Mexico and South America sigh for the sound of its bells.

The Giralda houses a "hagiography of bells," 25 of them, each named for a saint. Atop the spire a huge bronze figure of Faith holds a vanelike banner and turns slowly with the wind. The populace nicknamed the figure *Giraldillo*, Little Turner, from the Spanish verb *girar*, to turn; from this derives the name of the tower itself.

Erected by the Moors as minaret for the city's chief mosque in the 12th century, the tower has undergone many changes, and now shows the influence of several periods.

Today the Giralda forms part of Sevilla's Cathedral, a vast Gothic pile with flying buttresses. Its size fulfills its builders' avowed intent to "make such a Church that those who behold it shall think we were mad," for it is one of the largest Gothic churches in the world.

Next to the Cathedral another imposing edifice covers a whole block; the Casa Lonja, or Exchange, built in 1594 from designs of famed architect Juan de Herrera, the man who finished the Escorial and gave his name to a style of architecture. The rectangular building now houses the stupendous document collection of the General Archives of the Indies.

From the time when I first began to retrace the steps of the conquistadors in America, and to read of their exploits, I had seen references to this collection.† I wandered now among the magnificent mahogany racks and cases that hold nearly 36,000 files. The Archives contain the basic documents for practically the entire early history of the Americas, and only a fraction of this fabulous treasure has been published.

Autographs of Famed Adventurers

Glass cases display many of the first maps of the New World, astonishingly well drawn and painted in colors.

In one case alone I saw autographs of Cortes, Pizarro, and other conquistadors, grouped around a letter written by Christopher Columbus to his son, signed with the Admiral's famous cabalistic cipher.

This year Spain celebrates the 500th anniversary of the birth of Isabella, the farsighted queen who financed Columbus's expedition which discovered the New World.

After the discovery of America Sevilla became the chief port of embarkation for the Indies, and through the 16th century and part of the 17th enjoyed a virtual monopoly of trade with the New World. Hence the accumulation in Sevilla of documents relating to Spain's overseas possessions.

At Sevilla began the so-called Course of the Indies, over which ships sailed in about two and one-half months to Mexico, Panama, and Cartagena on the South American mainland. Doubtless this helps explain why the speech of Spanish America more closely resembles the Andalusian turn of tongue than the pure Castilian of the highlands.

* See, in the NATIONAL GEOGRAPHIC MAGAZINE, "Adventurous Sons of Cadiz," by Harriet Chalmers Adams, and "Moorean Spain," 26 illus. in color by Gervase Goubert, both August, 1924.

† See "On the Cortes Trail," by Luis Martin, NATIONAL GEOGRAPHIC MAGAZINE, September, 1940.



Loy Brothers Robed as Penitents Show that Holy Week Has Begun in Seville

And I have seen many other things which I cannot describe to you. The city of Seville is a beautiful city, and the people are very kind and hospitable. I have seen many things which I cannot describe to you.



Singing, Praying, Crowds Follow the Virgin's Mother Day Through the Streets

Thousands of people followed the Virgin's Mother Day procession through the streets of the city. The crowd was composed of men, women, and children of all ages. They were singing and praying as they followed the Virgin's Mother Day procession.



Pondicherry, Coor. Secular's Narrow Street of the Serpents. Cars and Carts Are Hidden
 Nowhere to be seen in the narrow street. The street is very narrow, and the crowd is so dense that
 from a distance the street looks like a solid mass of people. The street is very narrow, and the crowd is so dense that



2000 年 12 月 1 日。

The \mathcal{H}_∞ norm of the system is defined as the square root of the largest eigenvalue of the matrix \mathcal{H}_∞ . The \mathcal{H}_∞ norm of the system is a measure of the system's robustness to disturbances. The \mathcal{H}_∞ norm of the system is a measure of the system's robustness to disturbances.





100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200

Holy Week Tissues Selling in Hospitals Out of Season

For the first time in the history of the industry, tissues are being sold in hospitals out of season. The reason for this is the fact that the hospitals are now buying tissues in large quantities for the use of their patients. This is due to the fact that the hospitals are now buying tissues in large quantities for the use of their patients. This is due to the fact that the hospitals are now buying tissues in large quantities for the use of their patients.

For the first time in the history of the industry, tissues are being sold in hospitals out of season.





At Dusk Glowing Candles and Masked Penitents Advance Beneath Luminous Balconies

Scenes from the Good Friday procession in the city of Mexico. The procession is held on Good Friday and is a major event in the city's religious calendar.

Orange trees grow in public parks and squares and along many streets of Sevilla, and in season fill the city with the scent of orange blossoms. Small boys do not try to pick the ripe oranges because they are bitter, the kind that make the bitter-sweet marmalade of Scotland and England.

I breakfasted one morning under an orange tree in the courtyard of my hotel. When I asked for marmalade, the waiter said,

"I am sorry, sir, but we have none; the shipment has not yet arrived from England."

Sierpes, the Street of the Serpents, runs through the heart of Sevilla. So narrow that wheeled traffic is prohibited, Sierpes is not a long street, but along its steep and club-lined length flows the life of Sevilla (page 309).

No one seems to know why Sierpes bears the name; it runs nearly straight, and does not at all resemble a snake. By the way, the visitor to Spain should avoid using the word "snake" or "serpent"; Spaniards say it brings bad luck. If one does mention them, heaters mutter, *Lagarto*—lizard. This removes the curse.

Typical of Sevilla are the private clubs, called *tertulias*, in Sierpes and other central streets. Here, behind plate-glass windows, cattle barons, olive magnates, and orange and cork kings sit to watch the other half go by. Some club chairs have padded, crescent-shaped backs, so that members may turn the chair around and sit astride, comfortably leaning their elbows on the cushioned chair backs as they turn an indolent eye on the strolling crowds.

Where Cervantes Created Don Quixote

A plaque let into the wall of one club in Sierpes marks the site of the jail where Cervantes, says the inscription, "to the delight and amazement of the world," created the ingenious Hidalgo, Don Quixote de la Mancha. Cervantes set the scene of several of his works in Sevilla."

Sierpes itself is too busy and narrow for sidewalk cafés, but on side streets and in adjacent plazas little tables invite tired strollers to sit and drink sherry, while venders circulate among them, selling rose-pink prawns, shrimp, potato chips, crab mandibles, lottery tickets, and even marionettes (page 321).

Most of the venders are slight, dark boys, very knowing and cynical, and yet very appealing, with their dark eyes and sudden smiles.

I had seen bands of them in these same streets at Christmastime, singing carols and beating time on bells, triangles, metal spoons, and tambourines. Sometimes a boy played a

Londurria, a sort of lute, and, for a bass note another slapped the mouth of an earthen jug with an ox-rope sandal.

Campanilleros, bell ringers, they are called, and their boyish voices singing the simple rhythmic melodies, accompanied by the ringing metal and the booming of the jug, make a pleasant sound in the night.

In the elegant cafes of Sevilla, marked by the inevitable magnificence of great crystal chandeliers, the gentry sip coffee and liqueurs. Here I saw something I had first noticed in France. Every now and then an elegant woman would hitch up her skirt and sit on her slip, apparently to keep the skirt from wrinkling.

It seemed odd to see a smartly dressed woman in furs and diamonds, delicately sipping brandy, with her skirt tucked up and a foot of pink slip showing.

Andalusia Breeds Fighting Bulls

Andalusians love fine horses and fighting bulls. Of Spain's 168 major breeding ranches of "ferce" bulls, nearly half are in Andalusia.

To go to the most famous of them, the Miura ranch, I drove from Sevilla 20 miles to Carmona, site of an extensive Roman necropolis. Here a rudimentary road strack off across seemingly limitless pastureland.

Don Eduardo Miura, present head of an establishment that traces its blood line unbroken back to 1842, received me in his handsome white *cortijo* country house, and over glasses of manzanilla, a white wine like sherry, but drier and more aromatic, we talked of the bravery trials I had witnessed here some weeks before.

Don Eduardo had sent me a guarded telegram, "House party set for Thursday," it read, "hope you can come."

Breeders conceal the date of bravery trials, because if word leaked out, every *aficionado* for miles around who could drive, ride, or walk would hurry to the scene and impede the work of the breeders.

In a big pasture two wagons were lashed together as a camera platform from which I could make motion pictures.

The Miuras, father and son (Don Antonio Miura has ceded the direction of the ranch to his son Eduardo), and a group of friends including Pepe Luis Vázquez, one of Spain's leading matadors, wearing Andalusian country dress and wide-brimmed sevillano hat, mounted agile horses.

Most Andalusians are born horsemen. Perhaps their skill and their love of horseflesh

* See "Speaking of Spain," by Lila Markon, NATIONAL GEOGRAPHIC MAGAZINE, April, 1950.



Walter H. Jones, 1014 Locust St., St. Louis, Mo., has been elected president of the American Society of Mechanical Engineers for 1932-1933.

The first of these is the *Shu* (Book of Documents), which is the oldest of the four. It contains the speeches of the ancient kings, and is the source of the *Shu* (Book of Documents) in the *Shi* (Book of Poetry). The second is the *Shi* (Book of Poetry), which is the oldest of the four. It contains the poems of the ancient kings, and is the source of the *Shi* (Book of Poetry) in the *Shi* (Book of Poetry). The third is the *Shi* (Book of Poetry), which is the oldest of the four. It contains the poems of the ancient kings, and is the source of the *Shi* (Book of Poetry) in the *Shi* (Book of Poetry). The fourth is the *Shi* (Book of Poetry), which is the oldest of the four. It contains the poems of the ancient kings, and is the source of the *Shi* (Book of Poetry) in the *Shi* (Book of Poetry).



Colonnade and Archway, built in the Roman times in the 2nd century A.D. The archway is the only one of its kind in the world. It is a fine example of Roman architecture.



Coffee Drinkers Undisturbed by Women. Sit in the Morning Sun and Talk About Them

The men at the tables in the foreground are all wearing hats and suits. They are sitting at small tables with chairs. The women are standing and talking to the men. The buildings in the background are tall and have many windows. The scene is outdoors and it appears to be a sunny day.

with posters, pictures, guitars, draperies and rugs, competing for the prize offered by the municipality for the best decoration.

The casetas are the scene of much visiting back and forth, and music and dancing go on in them far into the night.

Down one side of the fairgrounds runs the street of Hell—the midway, with merry-go-rounds and sideshows. Near by, open-air restaurants sell food and drink.

Gypsies Specialize in Doughnuts

Gypsies, the dark, nonchalant race that has inhabited Spain for centuries, have their stands at the opposite side of the ground, where smoke and the hiss of frying grease announce their specialty; *buñuelos*, a sort of doughnut fried in deep fat, served with hot chocolate.

During the day everyone who has a horse or a mule- or horse-drawn vehicle goes to the fairgrounds to promenade. Men wear Andalusian cowboy dress and the inevitable sevillano hat, and women usually dress in full-skirted, polka-dot gypsy costume (page 526). Children wear their own gay versions of these costumes (page 505).

Spectators lining the sidewalks applaud when a galloping horse paces by. Every rider tries to have a girl behind him on the horse's crupper (pages 525 and 530).

I saw an amazing variety of carriages: open victorias and fiacres, high breaks, and several kinds of gigs, surreys, and wagons, as well as many rigs I could not identify.

Mules drew many of them, and nearly all wore bright harness, jingling bells, and tassels in the national colors, red and yellow (page 526).

At noon the mass of promenaders jams the fairground streets. The torrent of color flows slowly, as riders make a few turns, then stop at friends' casetas for a glass of manzanilla.

Sometimes the horsemen hitch their animals and go inside, but usually attendants rush racks filled with little cylindrical glasses out to the thirsty riders (page 527).

No one seems to eat during the Fair; everyone drinks manzanilla and dances the *sevillanas* to the jaunty music of a barrel organ.

Spectators keep time with the music by clapping hands; some on the beat, while others clap on the offbeat, which results in a tricky, syncopated rhythm.

All women of Sevilla, from childhood up, imitate the sevillanas, a graceful dance of much movement and clatter of castanets. In some tents I saw professional dancers, usually gypsies, dancing and singing in wild flamenco style.

The origin of the term *flamenco* in reference to singing and dancing is obscure. Literally the word means Fleming or Flemish, and some theorize that it was first applied to the soldiers who had fought in Flanders or who were stationed there when it was a Spanish possession.

Upon returning to the homeland, they must have seemed a wild lot to the stay-at-homes, who, when they heard singing and carousing in the streets at night, would shrug and say, "After all, they are flamencos."

True flamenco has a wild, abandoned sound, and undoubtedly stems from the Moors, though some have tried to find a Byzantine influence in its strange minor tones, embellished by modern exponents with extravagant modulations and vocal embroideries.

At 5 in the afternoon the fairgrounds are deserted; everyone has gone to the bullfight. At the Fair series of bullfights famous matadors repeat triumphs of other years and new "phenomena" consecrate themselves on the arena.

The sand of the bull rings of Barcelona and Valencia is whitish; that of the northern plazas is dark, and the Madrid ring has pinkish sand. Only in Sevilla could I see the bright golden sand of the Guadaluquivir, of a hue to gladden a color photographer's heart (page 512).

"Salt" Marks Sevilla Bullfighting

Sevilla, city of passionate bullfight aficionados, has produced many famous matadors, who have developed a style full of Andalusian grace and "salt," marked by gayety, color, and movement, full of embellishments in which the bullfighter reaches out to touch the bull's muzzle or horn, and stressing light-hearted and showy passes.

This contrasts with the sober, austere style of Ronca, where the classic rules of bullfighting originated.

At the gala bullfights of the Fair good-looking Sevillian girls wear white mantillas—the black ones are reserved for church-going (page 513)—and brilliant embroidered *mantones*, the so-called Spanish shawl that originated in Manila.

In the front rows at the bullfights sit the old aficionados, sevillano hat over one eye, and long Havana cigar tilted critically.

Sevilians like these aficionados believe in the good life. One old gentleman, of the type Spaniards call a "green old man," told me his slogan for living:

"Eat and drink well, make love boldly, and thumb your nose at death."

There are worse philosophies.



April Fair Rings Givern: Carmelita Wears a Manilla of Linked Yarn Balls

Miss Wren and I are going to the fair on the 15th. We are going to see the fair and the fair is the best of the fair. We are going to see the fair and the fair is the best of the fair.



Spring's in the Air, Several at the Fair—What More Could Towers Ask?

View of the Fair, from the Fair Grounds, looking down the street, towards the Fair Grounds, with the Fair Grounds in the background.



No Man Has Truly Seen Seville's Fair Without a Horse-Research and a Girl Behind
The scene is a typical one at the fair, where the horse-owners and the girls are
the main attraction. The horse-owners are usually men, and the girls are usually
young women. They are all dressed in their best, and they are all looking for a
good horse. The girls are usually looking for a horse that is white, and the
horse-owners are usually looking for a horse that is brown.



Parkedot Gown, Gypsis' Standard. A very beautiful fashion's favorite during the war. The design is a model of simplicity and elegance, for many cycles. The skirt is of a light color, and the bodice is of a darker color. The design is a model of simplicity and elegance, for many cycles. The skirt is of a light color, and the bodice is of a darker color.



* Mounted on Mount Annapurna, Peru
Hair Pale-gold Manzanilla

Through the use of a small number of carefully selected and trained observers, a representative sample of the population can be observed and recorded. The data are then analyzed statistically to determine the prevalence of the behavior being studied. This method is often used in the study of social behavior, such as aggression, cooperation, and communication.



4 Brother and Sister in the Church,
I feel I am now breathing in Air

Figure 1 shows the results of the regression analysis. The results indicate that the regression model is significant ($F(1, 10) = 10.00, p < 0.01$). The results also indicate that the regression model explains 50% of the variance in the dependent variable ($R^2 = 0.50$). The results indicate that the regression model is a good fit for the data ($F(1, 10) = 10.00, p < 0.01$).





Trotting Along, the old London. Tassels flying, the old London. Trotting Along, the old London.

Adapted from the original illustration by the artist.



Parte I: The The The

The first part of the book is a collection of essays on the history of the book. The second part is a collection of essays on the history of the book. The third part is a collection of essays on the history of the book.

The The

The first part of the book is a collection of essays on the history of the book. The second part is a collection of essays on the history of the book. The third part is a collection of essays on the history of the book.

The first part of the book is a collection of essays on the history of the book. The second part is a collection of essays on the history of the book. The third part is a collection of essays on the history of the book.



Boy and Girl—Daddy, the Fair, Share a Glass and a Dance

The illustration of a boy and girl in a fair setting, with a boy in a dark suit and hat and a girl in a blue and white striped dress, standing under a canopy with red and white streamers. The background shows a wooden fence and more streamers.

Perfume, the Business of Illusion

By LONNELLE AIRMAN

OUT of the sky over Syracuse dropped a perfume-laden helicopter—with a large Easter rabbit at the controls.

In New York City a man stepped out of a store, carrying jars of scented bath salts. He sprinkled the crystals on the icy pavement and then went back inside, as passers-by sniffed in surprise at the fragrant, frosty air.

In Washington, D. C., a crowd of curious shoppers gathered about the display window of a leading department store. They were watching a pretty girl in evening dress, who was apparently imprisoned inside a huge perfume vial, as a miniature ship is caught within a glass bottle.

Such antics are not figments of an Alice-in-Wonderland fantasy. They are real incidents in the day's work of a world-wide industry that in the United States alone has an annual "take" of more than one hundred million dollars.

The rabbit in the helicopter was actually a hard-working pilot dressed in masquerade for a stunt assignment to fly in an Easter shipment of a new perfume.

Sprinkling the bath salts was the idea of a cosmetics manufacturer, who thus disposed of some sample goods, protected pedestrians from slippery streets, and called attention to his products.

The girl in the bottle was, of course, an eye-catching advertisement, a flesh and blood demonstration of party-going perfume.

All this is part of the fabulous business of making and selling scent. For perfume is not a commodity that nourishes, clothes, or shelters. It is the essence of hope for the first prom, and the time-honored stand-by for that last minute anniversary present. It is the breath of romance—at 50 cents to \$100 an ounce!

Behind the Scented Curtain

Those in the trade speak of the power of association, of the "tweak to the nose of memory" by the fragrance that recalls some long-ago apple-blossom time, or the aroma of spice in a sunny, old-fashioned kitchen. They cite the psychologist's belief that smell is man's most primitive sense.

As for "matching your personality with your perfume," it is all a matter of physiology. The chemicals in the individual skin, say the doctors of scent, must harmonize with the perfume used. Otherwise, a fragrance changes or fades away.

That's perfume and its public. Exploring

behind the scented curtain, I found a practical industry that is stranger than Alice's dream. It is a world of scientific formulas and closely guarded secrets; of globe-girdling transport, customs regulations—and Ethiopian tribesmen who hunt wild civet cats for a man odorous essence of perfumery. For not the least of the anomalies in this business is the fact that its most delectable and expensive fragrances may contain tiny amounts of some of the worst smells known in Nature.

There is hardly a country which does not supply at least one of perfumery's numerous and exotic raw materials. Its aromatic oils and essences follow you from the cradle to the grave, from babyhood's delicate powders to the strong substances of the mortuary.

Even if you never touch perfume, you use it in scented soaps and creams; and in cooking turn to its flavors and spices. Tasting, as anybody who has ever had a head cold knows, is largely smell.*

Aromatics Linked with Medicine

Many of perfume's aromatics have a medical history, linked with the arts of beauty, that reaches back beyond Hippocrates to the healing practices of ancient Egypt. Some of its germicidal and antiseptic ingredients are still found in your doctor's prescription. Barber and beauty shops are safer, perfume chemists told me, because of these aromatic materials. Kissing would be more dangerous without them.

Modern perfume making itself has given birth to a new and allied activity that has grown to rival the parent industry. It supplies manufacturers of a wide range of articles, from rubber toys to house paint, with appropriate and customer-luring scents.

But perfumery is the only major field in which the nose is the final arbiter. In fact, the maestros of the profession—the men who dream up the formulas for fine perfumes—are known as "Noses."

A Nose is not necessarily an expert botanist and chemist, although often he is both. He must, however, have the sensitivity of a professional taster or winetaster, to be able to recognize and handle thousands of different odors and to blend his creations with that touch of universal magic called glamour.

The first conscious use of scent may have come about when some experimental Eve,

* See "Spices for Evence of Geography," by Stuart L. Jones, *NATURAL GEOGRAPHIC MAGAZINE*, March 1933.

Perfume, the Business of Illusion



The American Sam and Francis Book Binding Stores of Easton, Md. for Snow and for Scott
 The American Book Binding Store of Easton, Md. for Snow and for Scott
 The American Book Binding Store of Easton, Md. for Snow and for Scott
 The American Book Binding Store of Easton, Md. for Snow and for Scott

[illegible]

Subtle Woman's Final Touch of Fragrance Is Unbeating Man's Unending

Suppose that \mathcal{L}_1 is a linear space of functions $f: \mathbb{R}^n \rightarrow \mathbb{R}$ such that $f(x) = 0$ for all $x \in \mathbb{R}^n$ if and only if $f(x) = 0$ for all $x \in \mathbb{R}^n$. Then \mathcal{L}_1 is a linear space of functions $f: \mathbb{R}^n \rightarrow \mathbb{R}$ such that $f(x) = 0$ for all $x \in \mathbb{R}^n$ if and only if $f(x) = 0$ for all $x \in \mathbb{R}^n$.

Wenn die Welt und die Sonne beschaffen sind, wie wir sie heute betrachten, so ist es nicht möglich, dass die Sonne die Erde erwärmt. Die Sonne ist zu weit entfernt, um die Erde zu erwärmen. Die Wärme, die die Erde empfangt, kommt von der Sonne, aber sie ist nicht die Ursache der Wärme, die die Erde empfangt. Die Wärme, die die Erde empfangt, kommt von der Sonne, aber sie ist nicht die Ursache der Wärme, die die Erde empfangt.

Wahl 2004: 100–120; 131–132; 134–135; 137–138; 140–141; 143–144; 146–147; 149–150; 152–153; 155–156; 158–159; 161–162; 164–165; 167–168; 170–171; 173–174; 176–177; 179–180; 182–183; 185–186; 188–189; 191–192; 194–195; 197–198; 200–201; 203–204; 206–207; 209–210; 212–213; 215–216; 218–219; 221–222; 224–225; 227–228; 230–231; 233–234; 236–237; 239–240; 242–243; 245–246; 248–249; 251–252; 254–255; 257–258; 260–261; 263–264; 266–267; 269–270; 272–273; 275–276; 278–279; 281–282; 284–285; 287–288; 290–291; 293–294; 296–297; 299–300; 302–303; 305–306; 308–309; 311–312; 314–315; 317–318; 320–321; 323–324; 326–327; 329–330; 332–333; 335–336; 338–339; 341–342; 344–345; 347–348; 350–351; 353–354; 356–357; 359–360; 362–363; 365–366; 368–369; 371–372; 374–375; 377–378; 380–381; 383–384; 386–387; 389–390; 392–393; 395–396; 398–399; 401–402; 404–405; 407–408; 410–411; 413–414; 416–417; 419–420; 422–423; 425–426; 428–429; 431–432; 434–435; 437–438; 440–441; 443–444; 446–447; 449–450; 452–453; 455–456; 458–459; 461–462; 464–465; 467–468; 470–471; 473–474; 476–477; 479–480; 482–483; 485–486; 488–489; 491–492; 494–495; 497–498; 500–501; 503–504; 506–507; 509–510; 512–513; 515–516; 518–519; 521–522; 524–525; 527–528; 530–531; 533–534; 536–537; 539–540; 542–543; 545–546; 548–549; 551–552; 554–555; 557–558; 560–561; 563–564; 566–567; 569–570; 572–573; 575–576; 578–579; 581–582; 584–585; 587–588; 590–591; 593–594; 596–597; 599–600; 602–603; 605–606; 608–609; 611–612; 614–615; 617–618; 620–621; 623–624; 626–627; 629–630; 632–633; 635–636; 638–639; 641–642; 644–645; 647–648; 650–651; 653–654; 656–657; 659–660; 662–663; 665–666; 668–669; 671–672; 674–675; 677–678; 680–681; 683–684; 686–687; 689–690; 692–693; 695–696; 698–699; 701–702; 704–705; 707–708; 710–711; 713–714; 716–717; 719–720; 722–723; 725–726; 728–729; 731–732; 734–735; 737–738; 740–741; 743–744; 746–747; 749–750; 752–753; 755–756; 758–759; 761–762; 764–765; 767–768; 770–771; 773–774; 776–777; 779–780; 782–783; 785–786; 788–789; 791–792; 794–795; 797–798; 800–801; 803–804; 806–807; 809–810; 812–813; 815–816; 818–819; 821–822; 824–825; 827–828; 830–831; 833–834; 836–837; 839–840; 842–843; 845–846; 848–849; 851–852; 854–855; 857–858; 860–861; 863–864; 866–867; 869–870; 872–873; 875–876; 878–879; 881–882; 884–885; 887–888; 890–891; 893–894; 896–897; 899–900; 902–903; 905–906; 908–909; 911–912; 914–915; 917–918; 920–921; 923–924; 926–927; 929–930; 932–933; 935–936; 938–939; 941–942; 944–945; 947–948; 950–951; 953–954; 956–957; 959–960; 962–963; 965–966; 968–969; 971–972; 974–975; 977–978; 980–981; 983–984; 986–987; 989–990; 992–993; 995–996; 998–999; 1000–1001; 1003–1004; 1006–1007; 1009–1010; 1012–1013; 1015–1016; 1018–1019; 1021–1022; 1024–1025; 1027–1028; 1030–1031; 1033–1034; 1036–1037; 1039–1040; 1042–1043; 1045–1046; 1048–1049; 1051–1052; 1054–1055; 1057–1058; 1060–1061; 1063–1064; 1066–1067; 1069–1070; 1072–1073; 1075–1076; 1078–1079; 1081–1082; 1084–1085; 1087–1088; 1090–1091; 1093–1094; 1096–1097; 1099–1100; 1102–1103; 1105–1106; 1108–1109; 1111–1112; 1114–1115; 1117–1118; 1120–1121; 1123–1124; 1126–1127; 1129–1130; 1132–1133; 1135–1136; 1138–1139; 1141–1142; 1144–1145; 1147–1148; 1150–1151; 1153–1154; 1156–1157; 1159–1160; 1162–1163; 1165–1166; 1168–1169; 1171–1172; 1174–1175; 1177–1178; 1180–1181; 1183–1184; 1186–1187; 1189–1190; 1192–1193; 1195–1196; 1198–1199; 1200–1201; 1203–1204; 1206–1207; 1209–1210; 1212–1213; 1215–1216; 1218–1219; 1221–1222; 1224–1225; 1227–1228; 1230–1231; 1233–1234; 1236–1237; 1239–1240; 1242–1243; 1245–1246; 1248–1249; 1251–1252; 1254–1255; 1257–1258; 1260–1261; 1263–1264; 1266–1267; 1269–1270; 1272–1273; 1275–1276; 1278–1279; 1281–1282; 1284–1285; 1287–1288; 1290–1291; 1293–1294; 1296–1297; 1299–1300; 1302–1303; 1305–1306; 1308–1309; 1311–1312; 1314–1315; 1317–1318; 1320–1321; 1323–1324; 1326–1327; 1329–1330; 1332–1333; 1335–1336; 1338–1339; 1341–1342; 1344–1345; 1347–1348; 1350–1351; 1353–1354; 1356–1357; 1359–1360; 1362–1363; 1365–1366; 1368–1369; 1371–1372; 1374–1375; 1377–1378; 1380–1381; 1383–1384; 1386–1387; 1389–1390; 1392–1393; 1395–1396; 139

Mr. Sand, the New York head of the United Nations Relief and Rehabilitation Administration, said the agency needs "the proper personnel" for the job, and he said it is "a heavy task." He is working in the laboratory, he said, "to win the war to the peace." He says he will "not" make it "a successful thing."

But in the way and in character of the work which the Commission has done, it has been a good example to the people of the world. A good example of the way in which a group of people, by their own efforts, can do a great deal of good. The Commission has done a great deal of good, and it has done it in a way that is a good example to the people of the world.

[illegible]

the 'low' segment of the perimeter. Finally, a cross-section of the segment was taken perpendicular to a radial line and was used to calculate the area.

1. The first step is to identify the key components of the system. This involves understanding the hardware, software, and data involved in the process.

^aNot used, because of the small number of subjects taking less than 10 mg of morphine per code.

[illegible]

THE UNIVERSITY OF CHICAGO PRESS

For a proper well-posed problem of \mathcal{P} , the following conditions must be satisfied: (i) the problem must be well-posed and (ii) the solution must be unique and stable. However, in [15],



A French Factory's Air Is Thick with Scent and Licking Luscious Blissoms

Therefore, we have a polynomial-time algorithm for determining whether a given graph is a \mathcal{G} -graph. This algorithm can be used to solve the problem of determining whether a given graph is a \mathcal{G} -graph. The algorithm is as follows: Let G be a graph. Compute the chromatic number of G . If the chromatic number is greater than 2, then G is not a \mathcal{G} -graph. If the chromatic number is 2, then G is a \mathcal{G} -graph.

1970-1971, 1972-1973, 1974-1975, 1976-1977, 1978-1979, 1980-1981, 1982-1983, 1984-1985, 1986-1987, 1988-1989, 1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-1999, 2000-2001, 2002-2003, 2004-2005, 2006-2007, 2008-2009, 2010-2011, 2012-2013, 2014-2015, 2016-2017, 2018-2019, 2020-2021, 2022-2023, 2024-2025, 2026-2027, 2028-2029, 2030-2031, 2032-2033, 2034-2035, 2036-2037, 2038-2039, 2040-2041, 2042-2043, 2044-2045, 2046-2047, 2048-2049, 2050-2051, 2052-2053, 2054-2055, 2056-2057, 2058-2059, 2060-2061, 2062-2063, 2064-2065, 2066-2067, 2068-2069, 2070-2071, 2072-2073, 2074-2075, 2076-2077, 2078-2079, 2080-2081, 2082-2083, 2084-2085, 2086-2087, 2088-2089, 2090-2091, 2092-2093, 2094-2095, 2096-2097, 2098-2099, 2100-2101, 2102-2103, 2104-2105, 2106-2107, 2108-2109, 2110-2111, 2112-2113, 2114-2115, 2116-2117, 2118-2119, 2120-2121, 2122-2123, 2124-2125, 2126-2127, 2128-2129, 2130-2131, 2132-2133, 2134-2135, 2136-2137, 2138-2139, 2140-2141, 2142-2143, 2144-2145, 2146-2147, 2148-2149, 2150-2151, 2152-2153, 2154-2155, 2156-2157, 2158-2159, 2160-2161, 2162-2163, 2164-2165, 2166-2167, 2168-2169, 2170-2171, 2172-2173, 2174-2175, 2176-2177, 2178-2179, 2180-2181, 2182-2183, 2184-2185, 2186-2187, 2188-2189, 2190-2191, 2192-2193, 2194-2195, 2196-2197, 2198-2199, 2200-2201, 2202-2203, 2204-2205, 2206-2207, 2208-2209, 2210-2211, 2212-2213, 2214-2215, 2216-2217, 2218-2219, 2220-2221, 2222-2223, 2224-2225, 2226-2227, 2228-2229, 2230-2231, 2232-2233, 2234-2235, 2236-2237, 2238-2239, 2240-2241, 2242-2243, 2244-2245, 2246-2247, 2248-2249, 2250-2251, 2252-2253, 2254-2255, 2256-2257, 2258-2259, 2260-2261, 2262-2263, 2264-2265, 2266-2267, 2268-2269, 2270-2271, 2272-2273, 2274-2275, 2276-2277, 2278-2279, 2280-2281, 2282-2283, 2284-2285, 2286-2287, 2288-2289, 2290-2291, 2292-2293, 2294-2295, 2296-2297, 2298-2299, 2300-2301, 2302-2303, 2304-2305, 2306-2307, 2308-2309, 2310-2311, 2312-2313, 2314-2315, 2316-2317, 2318-2319, 2320-2321, 2322-2323, 2324-2325, 2326-2327, 2328-2329, 2330-2331, 2332-2333, 2334-2335, 2336-2337, 2338-2339, 2340-2341, 2342-2343, 2344-2345, 2346-2347, 2348-2349, 2350-2351, 2352-2353, 2354-2355, 2356-2357, 2358-2359, 2360-2361, 2362-2363, 2364-2365, 2366-2367, 2368-2369, 2370-2371, 2372-2373, 2374-2375, 2376-2377, 2378-2379, 2380-2381, 2382-2383, 2384-2385, 2386-2387, 2388-2389, 2390-2391, 2392-2393, 2394-2395, 2396-2397, 2398-2399, 2400-2401, 2402-2403, 2404-2405, 2406-2407, 2408-2409, 2410-2411, 2412-2413, 2414-2415, 2416-2417, 2418-2419, 2420-2421, 2422-2423, 2424-2425, 2426-2427, 2428-2429, 2430-2431, 2432-2433, 2434-2435, 2436-2437, 2438-2439, 2440-2441, 2442-2443, 2444-2445, 2446-2447, 2448-2449, 2450-2451, 2452-2453, 2454-2455, 2456-2457, 2458-2459, 2460-2461, 2462-2463, 2464-2465, 2466-2467, 2468-2469, 2470-2471, 2472-2473, 2474-2475, 2476-2477, 2478-2479, 2480-2481, 2482-2483, 2484-2485, 2486-2487, 2488-2489, 2490-2491, 2492-2493, 2494-2495, 2496-2497, 2498-2499, 2500-2501, 2502-2503, 2504-2505, 2506-2507, 2508-2509, 2510-2511, 2512-2513, 2514-2515, 2516-2517, 2518-2519, 2520-2521, 2522-2523, 2524-2525, 2526-2527, 2528-2529, 2530-2531, 2532-2533, 2534-2535, 2536-2537, 2538-2539, 2540-2541, 2542-2543, 2544-2545, 2546-2547, 2548-2549, 2550-2551, 2552-2553, 2554-2555, 2556-2557, 2558-2559, 2560-2561, 2562-2563, 2564-2565, 2566-2567, 2568-2569, 2570-2571, 2572-2573, 2574-2575, 2576-2577, 2578-2579, 2580-2581, 2582-2583, 2584-2585, 2586-2587, 2588-2589, 2590-2591, 2592-2593, 2594-2595, 2596-2597, 2598-2599, 2600-2601, 2602-2603, 2604-2605, 2606-2607, 2608-2609, 2610-2611, 2612-2613, 2614-2615, 2616-2617, 2618-2619, 2620-2621, 2622-2623, 2624-2625, 2626-2627, 2628-2629, 2630-2631, 2632-2633, 2634-2635, 2636-2637, 2638-2639, 2640-2641, 2642-2643, 2644-2645, 2646-2647, 2648-2649, 2650-2651, 2652-2653, 2654-2655, 2656-2657, 2658-2659, 2660-2661, 2662-2663, 2664-2665, 2666-2667, 2668-2669, 2670-2671, 2672-2673, 2674-2675, 2676-2677, 2678-2679, 2680-2681, 2682-2683, 2684-2685, 2686-2687, 2688-2689, 2690-2691, 2692-2693, 2694-2695, 2696-2697, 2698-2699, 2700-2701, 2702-2703, 2704-2705, 2706-2707, 2708-2709, 2710-2711, 2712-2713, 27

And, the more you understand of the way
the world works, the more you will be able to
control it. The more you know, the more you
will be able to control it. The more you know,
the more you will be able to control it. The more
you know, the more you will be able to control it.

1221 3 16 Himalayas in near Asia, minor but on small number of specimens. Field page 5471. (at least the animal skeleton and possibly ovary of the first specimen preserved) he was found on the western side of the Himalayas. It is reported that the Chinese have collected the Himalayas and the mountains of the

It is a good idea to make a list of the things that you are going to do, and to write down the date when you will do them. This will help you to keep track of your progress, and to make sure that you are doing everything that you need to do.

Many groups are in a mode of acquiring the glass of the more braver and the American industry. However, for pertains to a by a lot of the modern for industrial purposes. However, in the relative power of the trade, although the market is increasing and in some cases are motivated by the anti-trust efforts.

[illegible]

and, indeed, the final product comes without the use of harmful heat. The concentrated essences that eventually results is considered by many perfumers to be the closest man can come to realizing Nature's own creations. Further treated the concretes yield the perfumes' pleasant and delicate.

Finally, a subject of all is expression or pressing. This is the actual method used with citrus fruits—oranges, lemons, limes—and bergamots. Sometimes, as in certain Sicilian orchards, wood tubes are used to grind the fruit to a pulp and squeezed for liquid and the fragrance is caught up with a pump or it may be obtained by broken mechanical parts and other machinery.

The Chemists Take a Hand

With all the natural elements involved, there were several methods in Grasse where, by 1900, nearly all chemists realized that there was a new industry was growing.

Chemists, working in their laboratories, began to study the composition and structure of matter, to see how the molecules with fragrant scents resembled those of Nature. They began to discover how certain molecules combined to make certain scents. They began to study the molecules of the scents.

Once it had been found that the scent of a flower, such as a rose, was made up of many different molecules, it was possible to make the same scent by putting together these ingredients. Each ingredient has its own characteristic and dominant odor. Certain scents vary ones.

It was discovered, moreover, that different plants—the rose, the geranium, and citronella



Flacons, Tossing Like Ships in a Storm, As Perfume Blends

Once perfumers sent their creations to sea, they found that the sea was not so calm. Some of the most famous perfumes in the world were created by blending the scents of many different flowers and fruits. The process was often compared to a ship being tossed in a storm.

For an extraordinary experience, many of the more famous perfumes are varying proportions of different ingredients. The experimenters had to find the right balance.

Armed with this knowledge, chemists began to extract from more abundant and cheaper materials, such as rose hip and carnation blossoms, the approximate odors of the more expensive scents. They began to create scents in a way that closely comes closer to Nature.

They have now reached a point where they



Ambergris, Extraction of Sick Whale, Helps Blend and Fix the Finest Perfumes

It is possible to construct a function f on \mathbb{R}^n such that f is not in $L^p(\mathbb{R}^n)$ for any p in $[1, \infty]$ and f is not in $L^\infty(\mathbb{R}^n)$ either. For example, let $f(x) = \frac{1}{|x|}$ for $|x| \geq 1$ and $f(x) = \frac{1}{|x|^2}$ for $|x| < 1$. Then f is not in $L^p(\mathbb{R}^n)$ for any p in $[1, \infty]$ and f is not in $L^\infty(\mathbb{R}^n)$ either.

grossed out for potential waste is turned out every 15 minutes.

Cloud computing platforms and storage nodes are producing derivatives nine times faster than the last 12 months, as measured by the number of new patents filed, says a new study by analysts at IDC.

But in certain places the raw materials are plentiful and have been laid down, built up, or stored up and are stabilized. Out of it all come such well known synthetic materials as acetone, which is made from corn or wheat, and alcohol, made from grain or grapes. The other synthetic materials, such as acetone, are made from oil or coal, and are made by the chemical industry. The synthetic materials are made from chemicals, and in oil of lemon grass.

There is a laboratory where chemists test gas-liquid impurity reactions. Cookers geared to simulate the process are used to determine the decomposition temperatures of impurities. The results are plotted against the amount of impurity in the gas.

I found fragrant milk redolent with the
 sweet perfume of the flowers of the
 delicate crystalline variety, which
 has a very delicate and agreeable
 flavor.

In yet other rooms I saw long lines of giant stills and condensers (page 538), attached to floor and ceiling by a labyrinth of pipes. Some of these pipes bring in the warm air, while others take off the various vapors flowing toward still after room where they are used. With the pipes and stills

[illegible]



No Price Smells Allowed. These Same Displays Contraband Perfumes, Balm and Wine. No one

This shop is a well-known one at New York for failure to meet the requirements of the government. It is a well-known one for failure to meet the requirements of the government. It is a well-known one for failure to meet the requirements of the government.

The all is orders, which may range from a few single pounds to many tons, this factory does enough work to fill the city, and also to serve a good town. It covers 30 acres and has its own fire department.

But the secret for an aromatic plant is not found in its perfume, or even in its chemical formulae. It is revealed in the "secret" kept by an expert chemist who studies the sample of finished material.

The chemist studies the sample very closely, and it was found by him that the essence of the plant is not even in the leaves, but in the seed. It is not in the seed, but in the seed. It is not in the seed, but in the seed.

It is a fact that the secret of the perfume is not in the leaves, but in the seed. It is a fact that the secret of the perfume is not in the leaves, but in the seed. It is a fact that the secret of the perfume is not in the leaves, but in the seed.

Scented Linoleum Includes a "Best Smaller"

The old East and West countries have a new way of making perfumes. It is a new way of making perfumes. It is a new way of making perfumes. It is a new way of making perfumes.

group tests some have been found to favor odors generally considered revolting.

Other experiments hint at the effect that color and other associations may have on perfume preferences. One group asked to sniff two bottles of differently colored perfume, nearly all gave reasons for favoring one over another, although the odor actually was the same.

Every girl knows that her "Allure No. 17" may live up to its name with one beau and bring from another the disgusted comment,

"Where'd you get that?" The lavish use of scent may provoke pleased compliments in one social group and polite censure in another. European and Latin American men frankly delight in perfume for themselves, while American men shudder at the word. But even Anglo-Saxons can be wooed by a "man's cologne," bottled in a sturdy container and carried with horses and dogs.

That the scent appeal is real, though unconscious, was proved by a shaving-cream manufacturer who sent

out thousands of letters to men asking whether they preferred his product perfumed or unperfumed. Ninety-six percent voted against the scented article. A little later, when the same group was queried on its choice of two shaving-cream samples, 92 percent favored the one which had been perfumed—just in case.

Yet the human nose, as a delicate apparatus, is capable of extraordinary feats. It can smell substances that are too minute to be detected chemically or to be weighed by any precision instrument. For instance, a normal person can notice mercaptan—a gas to the worst odor ever compounded—in an amount



Western China's Musk Deer Gives His Life to Perfumery

Lacking antlers, the deer secretes the upper canine teeth as ivory. It carries a glandular pouch that secretes a glandular material which, by its odor, intensifies perfumery's delicate flower odors (page 537). One gland secretes millions of cubic feet of air. Chemists, by synthesizing musk in the 1930's, improved the deer's life chances. The hunter was attached to the American Geographic Society-Joseph F. Rock expedition to Yunnan (1927).

of only one ten-millionth of a pound in 100 cubic feet of air. It has a lifesaving capacity when the noxious gas, added to household lighting, heating, and cooking gas, gives warning of dangerous leaks.

One group of students has experimented with variety in our odor sensations by testing for chemical reactions. These experiments called for a test of sweet, acid or sour, salt, and caprylic acid. Humans generally respond to this scale like the fragrance of clove, one. The masculine vote, certain tests indicated, tends toward musky odors, the feminine to those of the lighter, flowery group.



Commissaires Find Pleasant Soothing in Grasse's Fragrant Showrooms

What better way to refresh one's senses on a trip to the Riviera than to visit the perfume showrooms of Grasse? The town is famous for its perfume, and the showrooms are a must-see for anyone visiting the town. The atmosphere is pleasant and soothing, and the products are of high quality.

Youth Samples the Breath of Romance in a Long Island Drugstore

For many young people, a visit to a drugstore is a place where they can find romance. The atmosphere is romantic, and the products are of high quality. The young people are looking for something special, and the drugstore has everything they need.



Alaska's Russian Frontier: Little Diomedé

by Audrey and Frank Morgan



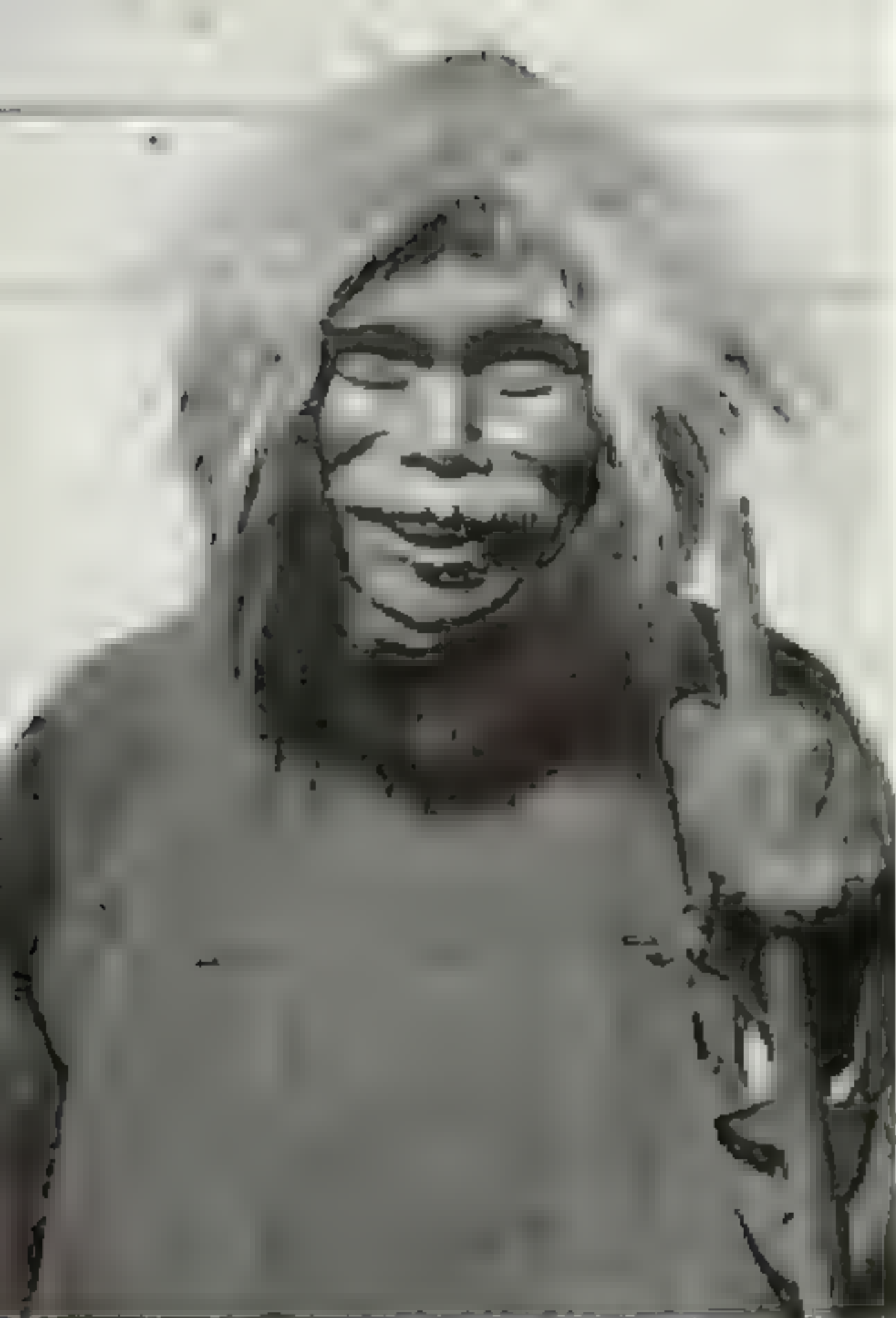
American Eskimos Three Miles from Russia, Skid a Skin Boat into the Boundary Channel.

Small Eskimo boats, carrying a few men, have been seen skidding down the coast of Alaska and into the Bering Sea. The boats are being used to transport goods and passengers across the boundary between the United States and Russia. The boats are being used to transport goods and passengers across the boundary between the United States and Russia.

The boats are being used to transport goods and passengers across the boundary between the United States and Russia. The boats are being used to transport goods and passengers across the boundary between the United States and Russia.

The boats are being used to transport goods and passengers across the boundary between the United States and Russia. The boats are being used to transport goods and passengers across the boundary between the United States and Russia.

The boats are being used to transport goods and passengers across the boundary between the United States and Russia. The boats are being used to transport goods and passengers across the boundary between the United States and Russia.

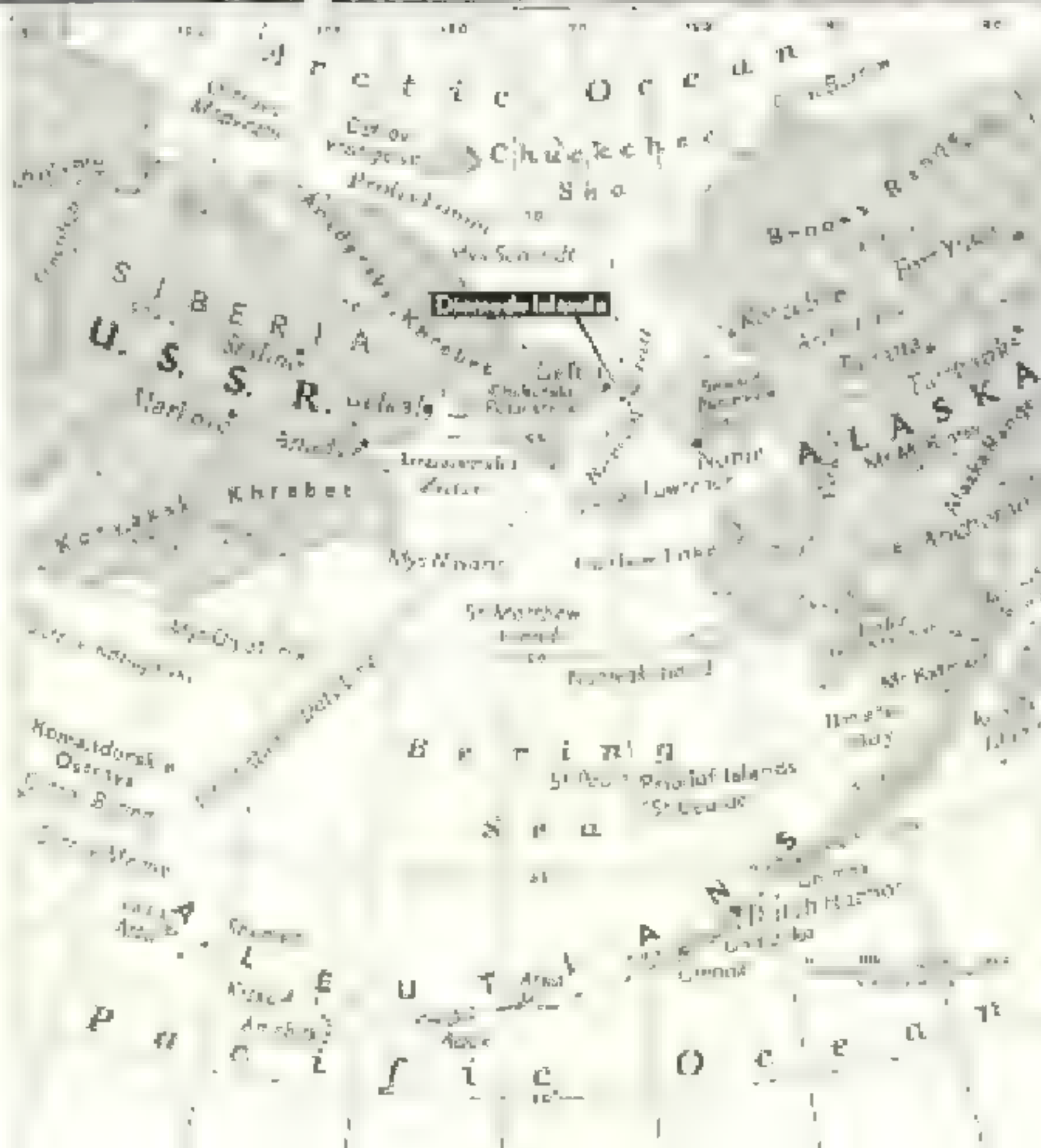


• Irene and Rebecca Form a Devoted Husband-Wife Team

Irene and Rebecca, a devoted husband-wife team, are the only two living in the town of... They are... the only two living in the town of...

Irene and Rebecca, a devoted husband-wife team, are the only two living in the town of... They are... the only two living in the town of...

Irene and Rebecca, a devoted husband-wife team, are the only two living in the town of... They are... the only two living in the town of... Irene and Rebecca, a devoted husband-wife team, are the only two living in the town of... They are... the only two living in the town of...





Big Diomede Lies Across the Channel—Another Nation, Another Hemisphere, Another Day!
 The U. S.-U. S. S. R. boundary line here and there runs between these shores. Seen off from Russia, Little
 Diomede is a tiny bit of earth. Alaska—Four hundred miles across the water and crowded with cities.



71

Bering Strait, Dinmède's Ice Food Locker, Yields Seals for Suits, Blubber, and Fat Oil

A 100-sq.-mi. ice food locker in the Bering Strait, near the American coast, yielded a 100,000-lb. yield of seals for suits, blubber, and fat oil.





An Entire Family Turns Out to Fish in an Ice Hole

Out on Wendover tundra
the entire family has
turned out to fish in an
ice hole. The father, who
is a professional fisherman,
is the only one who has
been able to catch a fish.
The mother and three
children are all sitting
in the hole, waiting for
a fish to bite.

The father is the only
one who has been able
to catch a fish. The
mother and three children
are all sitting in the hole,
waiting for a fish to bite.

The father is the only
one who has been able
to catch a fish. The
mother and three children
are all sitting in the hole,
waiting for a fish to bite.





Sea Owl and Cinvas Wick Feed a Stove Cooking the Dinner and Heating the Home

and Cinvas Wick feed a stove cooking the dinner and heating the home. The stove is a large, dark, cylindrical object, possibly a barrel or a large pot, and the man is holding a long, thin object, possibly a stick or a pipe, and appears to be feeding or tending to it.





Baby's Primitive Pacifier Is a Gob of Blubber Pierced with a Stick

Some babies are born with a natural pacifier, but this one has to be made. The mother has taken a piece of blubber and pierced it with a stick to make a pacifier for her baby.



Sylvan Pops into His Porch, His Door Is a Hole in the Floor

Let's meet a primitive boy who has a very unusual way of getting into his porch. The boy's father has made a hole in the floor of the porch and the boy can pop up through it. The boy is very happy and likes to play on the porch. He has a very good friend who lives in the porch too. They play together every day.





For 2,000 Years a Village Has Clung to Little Dismal's Snow- and Wind-swept Slope



Men Secure Bunkers Against Berlin's Crushing Ice Packs: Dogs Hunt Skulful of Meat



Arctic Trancers Throb, Dancers Squat and Sway

SOME EARTHLY DANCE, though, and the influence of American popular music and the American dance band and the fact that the Inuit have a strong sense of rhythm and a love of music, have led to the development of a new style of dance. This style is a combination of the old and the new, and it is a very interesting sight to see. The dance is a combination of the old and the new, and it is a very interesting sight to see.

The dance is a combination of the old and the new, and it is a very interesting sight to see. The dance is a combination of the old and the new, and it is a very interesting sight to see. The dance is a combination of the old and the new, and it is a very interesting sight to see.

The dance is a combination of the old and the new, and it is a very interesting sight to see. The dance is a combination of the old and the new, and it is a very interesting sight to see. The dance is a combination of the old and the new, and it is a very interesting sight to see.

The dance is a combination of the old and the new, and it is a very interesting sight to see. The dance is a combination of the old and the new, and it is a very interesting sight to see. The dance is a combination of the old and the new, and it is a very interesting sight to see. The dance is a combination of the old and the new, and it is a very interesting sight to see.





A Little Deindee Nominer Scoops His Winged Quarry from the Air
Five birds, threading a raspy net strand were as lucky. The hunter, crouching behind a rock, swings his long net
a circle and is doing low to my shade. One bird took 203 birds in an hour and a half

NATIONAL GEOGRAPHIC SOCIETY

GEOGRAPHIC ADMINISTRATION BUILDING
SIXTEENTH AND M STREETS NORTHWEST, WASHINGTON 5 D. C.

GILBERT GROSVENOR, President
ROBERT V. FLIMING, Treasurer
HERBERT A. PERLEY, Assistant Treasurer
HILFANY F. HUBBARD, Assistant Treasurer
LYMAN J. HERRICK, Joint Board Research Committee

JOHN OLIVER LA GORCE, Vice President
THOMAS W. BARNES, Secretary
VERACON H. BREWSTER, Assistant Secretary
MELVIN M. PAYNE, Assistant Secretary
KIRTC M. HANSON, Assistant Secretary

STAFF OF THE NATIONAL GEOGRAPHIC MAGAZINE

GILBERT GROSVENOR, EDITOR

JOHN OLIVER LA GORCE, Associate Editor

J. M. HILFBRAND
Editorial Staff
JAMES M. DARLEY
Chief Cartographer
NEWMAN B. MURRAY
Editorial Staff
CHARLES E. RICHMOND
Cartographic Staff
WILLIAM CHAMBERLIN
Cartographic Staff
GEORGE ORDETTE
Editorial Staff
JAYMONS W. WELCH
Director of Advertising
JOHN G. LA GORCE
Assistant Director of Advertising

MICHAEL DELL GROSVENOR
Assistant Editor
FRANKLIN L. FISHER
Editorial Staff
LEONARD C. MOY
Chief of School Service
WILLIAM D. NICHOLS
Editorial Staff
F. BARROWS COLTON
Editorial Staff
ANTHONY W. BROWN
Editorial Staff
JANE B. HAN
Editorial Staff
ESTHER ANN MANNON
Librarian
WILLIAM A. KINNEY
Chief News Bulletin Service

FRANKLIN L. FISHER
Chief Illustrations Division
STANFORD OWEN WILLIAMS
Editorial Staff
EDWIN L. WISHARD
Chief Photography Laboratory
WALTER M. FOLKARD
Editorial Staff
KIP KOS
Editorial Staff
MASON S. DICKLAND
Editorial Staff
HOWELL WALKER
Editorial Staff

BOARD OF TRUSTEES

JOHN G. LA GORCE
Secretary of Defense
Department of the Army, United States
ERNEY A. LINDEN
Chairman of the Board
Metropolitan Life Insurance Co.
LYMAN J. HERRICK
Director National Bureau of Standards, United States
JAMES M. DARLEY
Chief Cartographer
National Geographic Society
EMORY S. LANE
Vice Admiral, U. S. Navy, Retired
GEORGE H. PUTNAM
Publisher of Putnam
FRANKLIN L. FISHER
Editorial Staff

ROBERT V. FLIMING
President and Chairman of the Board
Kaiser National Bank
CHARLES F. KETTERING
General Motors Corporation
WILLIAM C. FRAY
General U. S. Navy, Retired
JAN T. THOMPSON
President Pan American Airways
ALEXANDER W. WILSON
Special Agent in Charge, U. S. Department of Agriculture
GILBERT GROSVENOR
President National Geographic Society
MICHAEL DELL GROSVENOR
Assistant Editor

JOHN OLIVER LA GORCE
Vice President of the United States
L. O. COLBERT
Rear Admiral, U. S. Coast and Geodetic Survey, Retired
ERNEST R. MORRIS
Editorial Staff
THOMAS W. BARNES
Secretary National Geographic Society

ORGANIZED FOR "THE INCREASE AND DIFFUSION OF GEOGRAPHIC KNOWLEDGE"

To carry out the purpose for which it was organized thirty three years ago, the National Geographic Society publishes this Magazine monthly. All requests are answered in The Magazine, and are expedited directly to the author.

Articles and photographs are desired. For material The Magazine will guarantee remuneration is made.

In addition to the editorial and photographic, every one can do a noble service, some of which require years of field work to achieve their objectives.

The Society has been successful in its efforts to increase the knowledge of the world's history. It has been a period of great activity, and the Society has been successful in its efforts to increase the knowledge of the world's history.

In Mexico, The Society and the Smithsonian Institution, in 1904, discovered the oldest work of man in the Americas for which we have a date. This date of 11,000 years ago was discovered in the state of Sonora, Mexico, and remains of it are still visible at the site of the discovery.

The Society has been successful in its efforts to increase the knowledge of the world's history. It has been a period of great activity, and the Society has been successful in its efforts to increase the knowledge of the world's history.

A notable undertaking in the history of astronomy was the discovery of the first artificial satellite of the Earth. This project will require four years to complete the first stages of study and will provide the first step in the development of a new era of space exploration.

In 1904 The Society sent out seven expeditions to study the geology of the United States and its territories. These expeditions were successful in their efforts to increase the knowledge of the world's history.

The Society granted \$25,000 and an additional \$15,000 was contributed by individual members to the project. The project was successful in its efforts to increase the knowledge of the world's history.

One of the world's largest and most famous systems of waterways was discovered in Alaska and was named for the Society and the United States of America.



Someone you love
IS HOPING FOR A HAMILTON

RIGHT...on time!



Let me tell you that there are many things that you can't see with your eyes. A Hamilton watch is one of them. It's a masterpiece of engineering and design. It's a watch that's built to last. It's a watch that's built to be accurate. It's a watch that's built to be beautiful.

Another date that should be a memorable event is May 13. That's Mother's very own Day. Why not make it a love affair with her very own Hamilton?

Let me tell you that there are many things that you can't see with your eyes. A Hamilton watch is one of them. It's a masterpiece of engineering and design. It's a watch that's built to last. It's a watch that's built to be accurate. It's a watch that's built to be beautiful.

Why do the timepieces meet some of the standards of fine watch-making... and fewer still meet more... only Hamilton meets them all.



Hamilton's timepieces are the only ones that have been tested and approved by the U.S. Government. They are the only ones that have been tested and approved by the U.S. Government. They are the only ones that have been tested and approved by the U.S. Government.

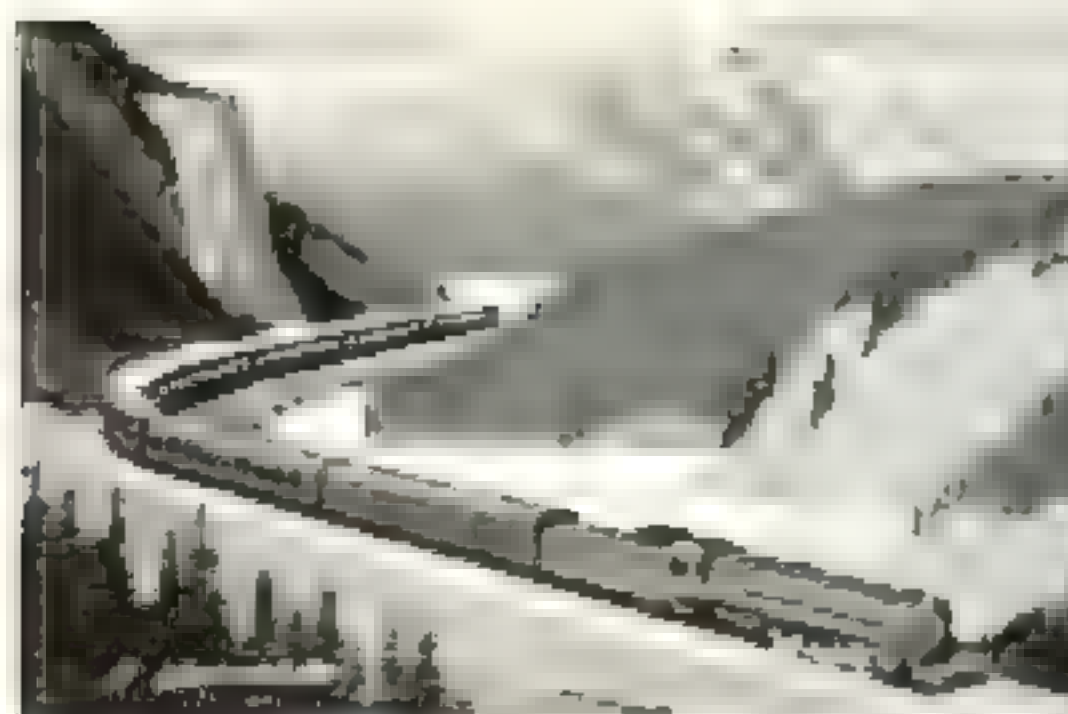
Hamilton's timepieces are the only ones that have been tested and approved by the U.S. Government. They are the only ones that have been tested and approved by the U.S. Government. They are the only ones that have been tested and approved by the U.S. Government.



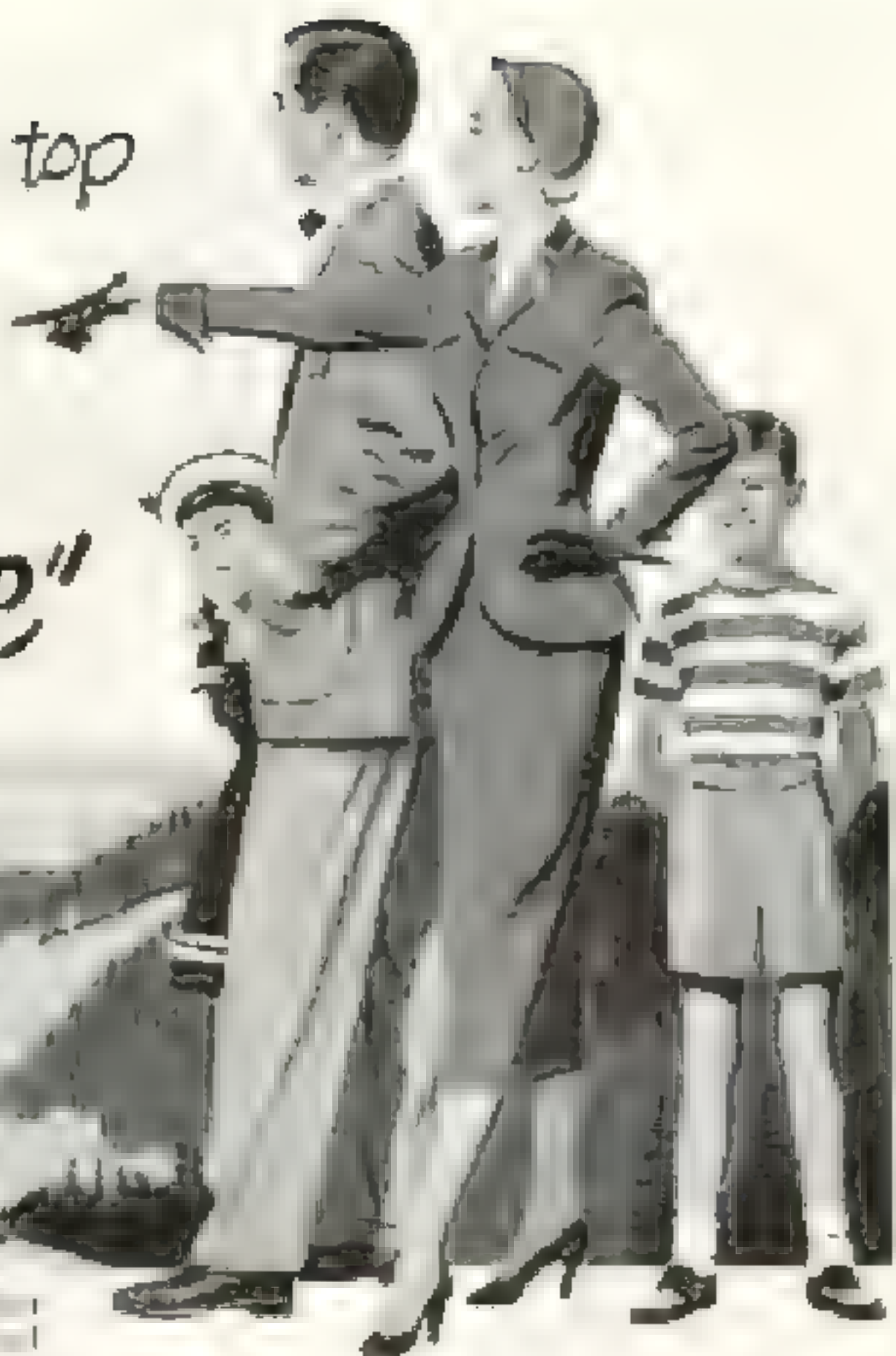
The Watch of Railroad Accuracy

Mention the National Geographic—It identifies you

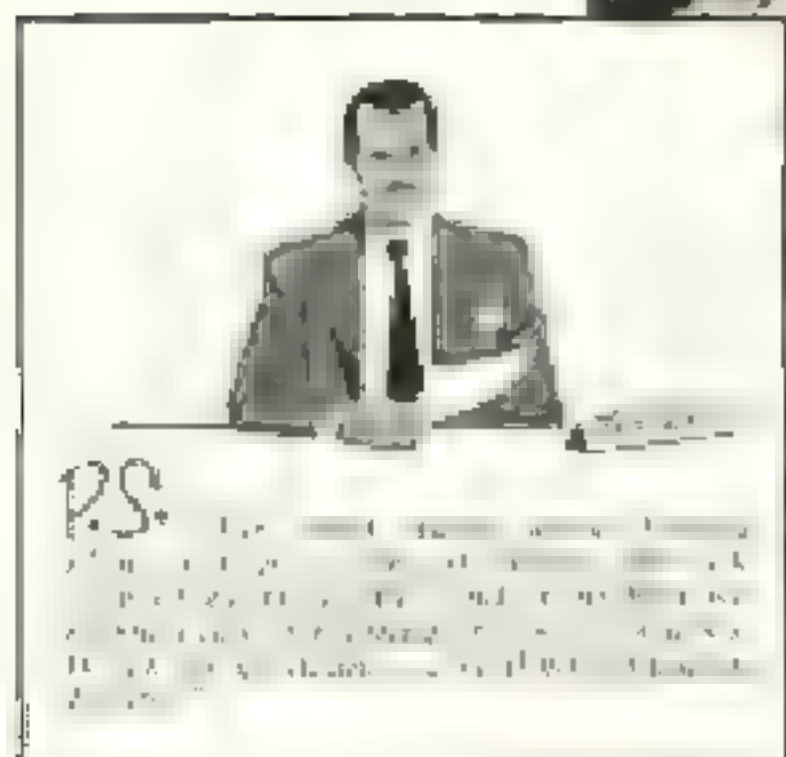
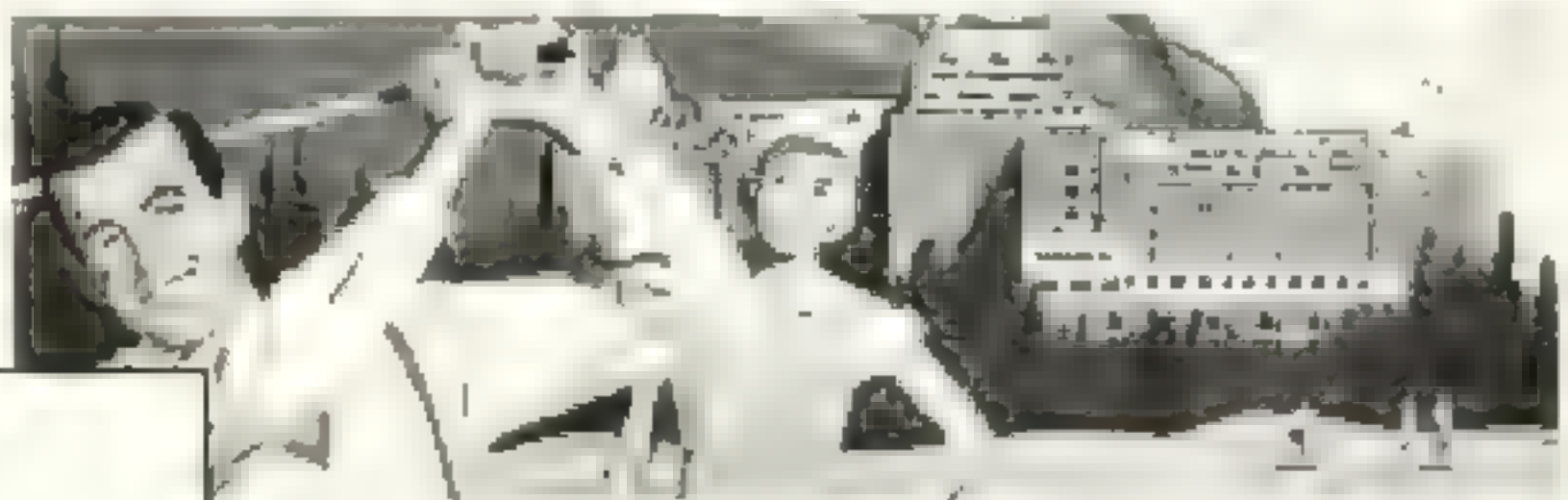
"We vacationed on top
of the world at
**Banff and
Lake Louise**"



"The moment we sighted the snowing Canadian Rockies, we knew our greatest dream had come true. The trip of a lifetime, and our Canadian Pacific holiday was off to a delightful start. With family parties, we were at Banff Springs every high holiday, our children liked, danced, played, and went to the shops. John and I got on a membership card and danced every night. We were happy and had a great trip."



"At Lake Louise more thrills awaited! A party heated in 70° F. mountain trails was a great experience. And nearby, Columbia Ice Factory, Victoria Hotel, and the Hotel de Ville. The service everywhere was courteous, perfect. It was the best of a lifetime!"



P.S. The Canadian Pacific Railway is the only one in the world that runs from coast to coast. It is the only one that runs from the Atlantic to the Pacific. It is the only one that runs from the Gulf of Mexico to the Arctic Ocean. It is the only one that runs from the United States to Canada.

Canadian Pacific

SPANS THE WORLD

Railways • Steamships • Airlines
Express • Communications • Express



SEE TO A LOCAL AGENT OF CANADIAN PACIFIC IN PRINCIPAL CITIES IN U.S. AND CANADA

Mention the National Geographic—It identifies you

Top Secretary...

and
thousands
like her
prefer
the Remington

Electri-conomy

Today, essential industries realize that it takes peak output in the office to achieve peak production in the plant. That's why top secretaries like General Petroleum's Miss Schranz go for the swift, effortless typing speed of the Electri-conomy — those 20 clear carbons at one typing — the handsome "Executype" for letters — a true distinction that will be signed with pride — and that glorious "alive-at-five" feeling because electricity does the work!

Top secretaries everywhere are making — according to the latest statistics — a switch to the Remington Electri-conomy. General Petroleum's Miss Schranz, for example, has this to say about the Electri-conomy: "I would like to tell you Remington electric typewriters... it is well known to me."

REMINGTON RAND ROOM 1050
210 HUNTER AVE., NEW YORK 10, N. Y.

☐ Yes, I would like a FREE booklet
"The New Remington Electri-conomy
Typewriter."

☐ I would like a FREE demonstration
of the Electri-conomy without obligation, of course.

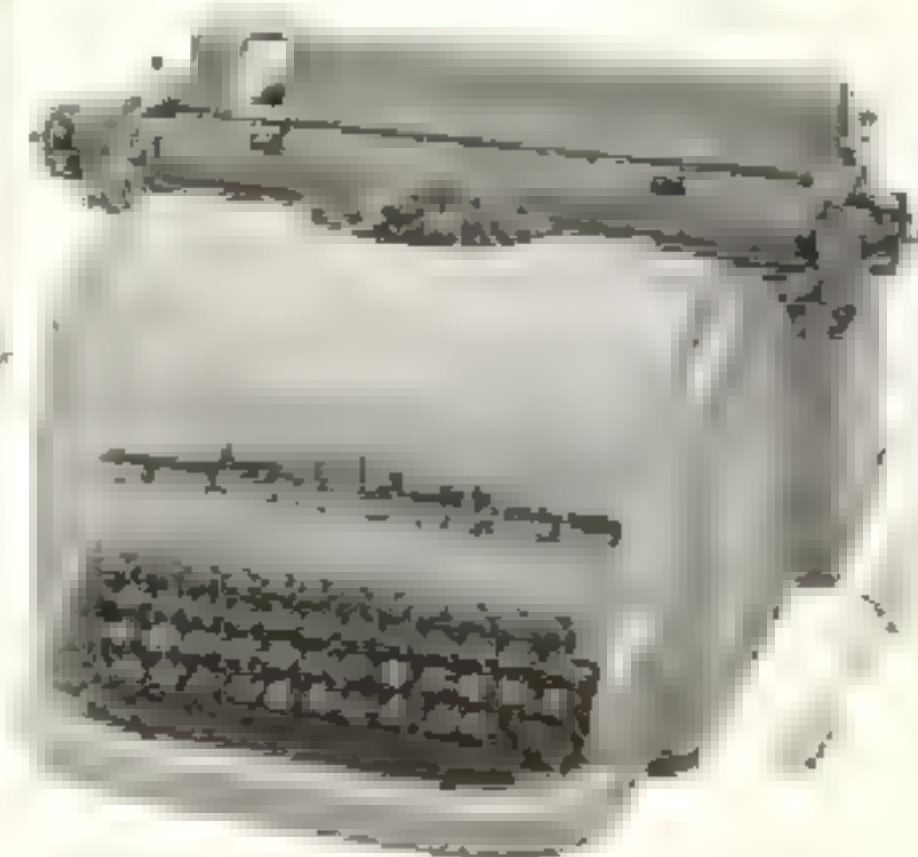
Name _____

Company _____

Address _____

City _____

State _____



Remington Rand THE FIRST NAME IN TYPEWRITERS

Mention it in National Geographic — It identifies you



This spring, let TWA take you to



SPAIN

and its unchanging Old World charm

(It's only overnight from the U. S.
by TWA Constellation)

These ancient cities bask in the mellow spring sun. And you can be exploring their Old World splendor tomorrow, when you travel by the New World's famed TWA Constella-

tion. From take-off time till you land in Madrid, you'll find the warm hospitality, the superb comfort and service, a delightful experience on your fast, direct flight. Favorable exchange rates make your money go far. For complete information, see your travel agent or send the coupon to TWA.

*Across the U.S. and overseas...
you can depend on*

TWA

TRANS WORLD AIRLINES

U.S.A. • EUROPE • AFRICA • ASIA

Name

Address

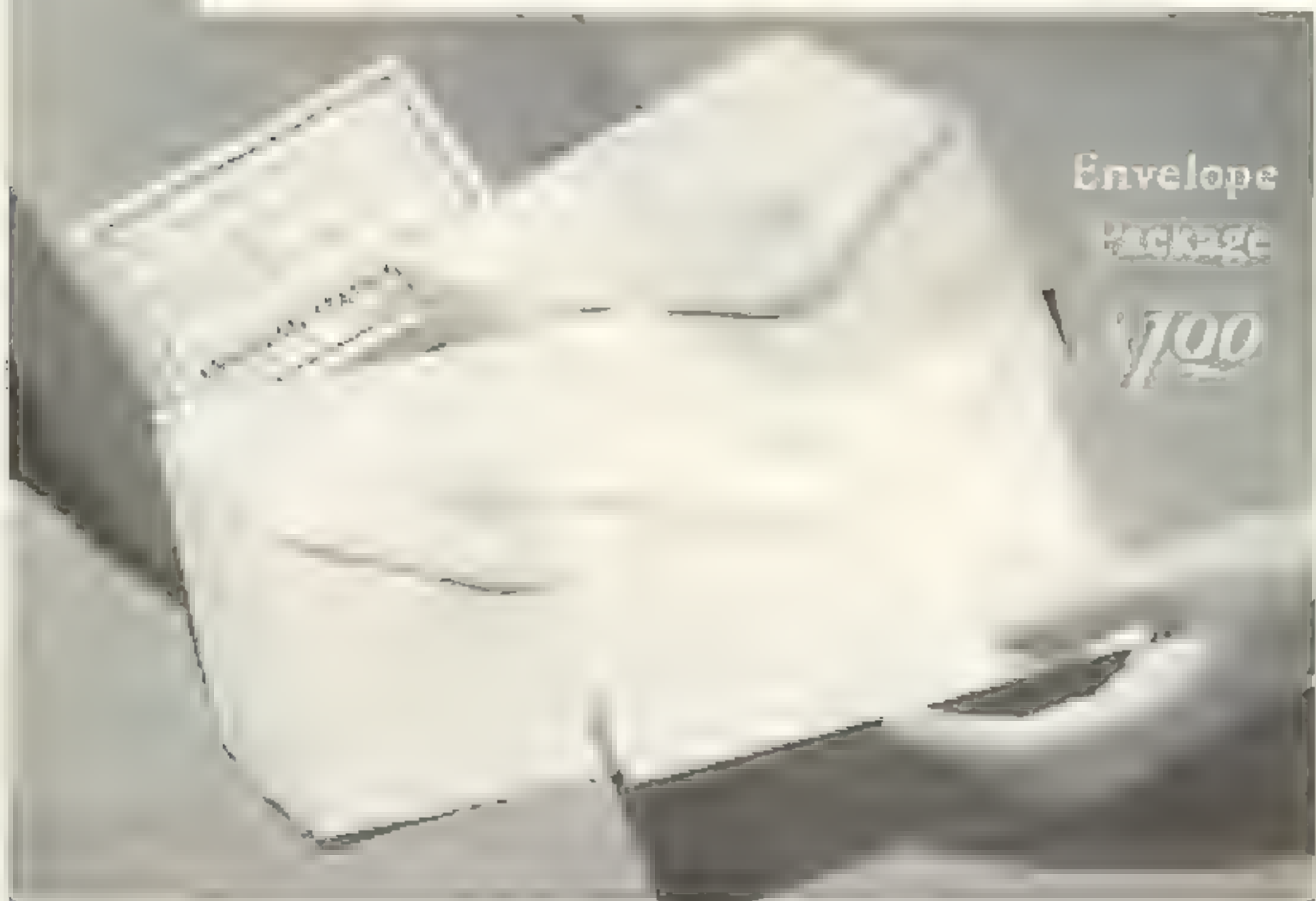
City

State

Phone No.

Zone

IF YOU MAIL CHECKS...



Envelope
PACKAGE
\$100

ENVELOPE PACKAGE

200 WHITE 5 1/2 x 7 1/2 ENVELOPES (100 NEW, 100 RECYCLED)
ENVELOPES. Ideal for informal mail.
\$100

STANDARD PACKAGE

200 WHITE 5 1/2 x 7 1/2 ENVELOPES (100 NEW, 100 RECYCLED)
ENVELOPES. Ideal for informal mail.
\$100

DELUXE PACKAGE

500 WHITE 5 1/2 x 7 1/2 ENVELOPES (250 NEW, 250 RECYCLED)
ENVELOPES. Ideal for informal mail.
\$200

CORRESPONDENCE CARD PACKAGE

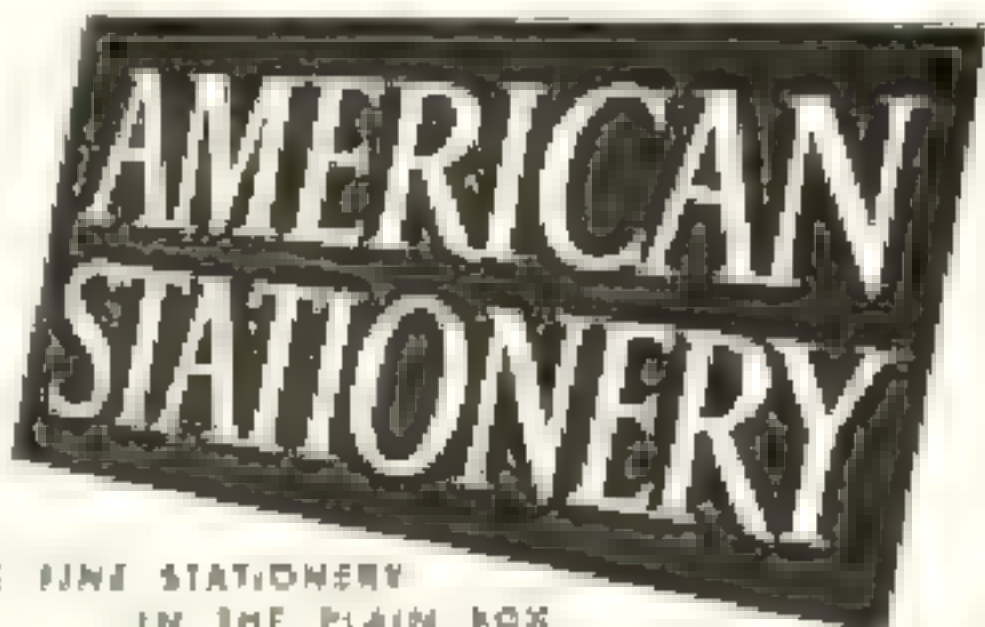
100 CORRESPONDENCE CARDS (4 1/2 x 6 1/2) and
100 ENVELOPES. Cards are lithographed.
\$150

And... for those who want to go even further...
we have a special package...
for those who want to go even further...
we have a special package...

THE AMERICAN STATIONERY CO.
606 PARK AVENUE, PERU, INDIANA

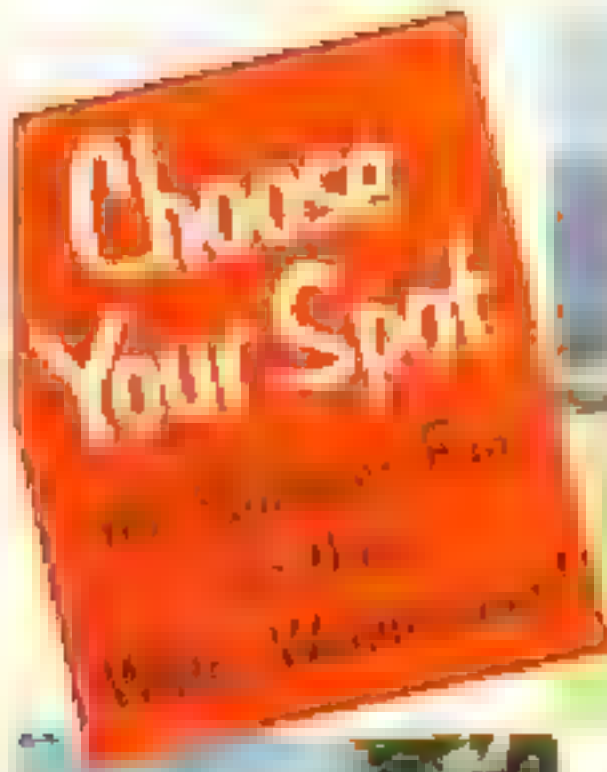
When you mail checks, you need envelopes that are secure, durable and easy to use. The American Stationery Co. Envelope Package is just what you need. It's printed with your name and address in rich blue ink. You're clearly identified as the sender — your mail can't go astray. And you have envelopes when you need them... for that is a big, generous package!

Finger tip pressure on the tight seal flaps keeps your checks in the envelopes. The paper is quality, smooth and easy to fold. The package is a big, generous package — you'd never be without!



THE FINE STATIONERY
IN THE PLAIN BOX

As seen in the National Geographic Magazine



1,210,000 miles of
"Fresh Water Landings"



31,330 miles of streams stocked
with fighting game fish



60,000 miles of scenic
picturesque highway



17,000 lakes, bays, ponds
and rivers



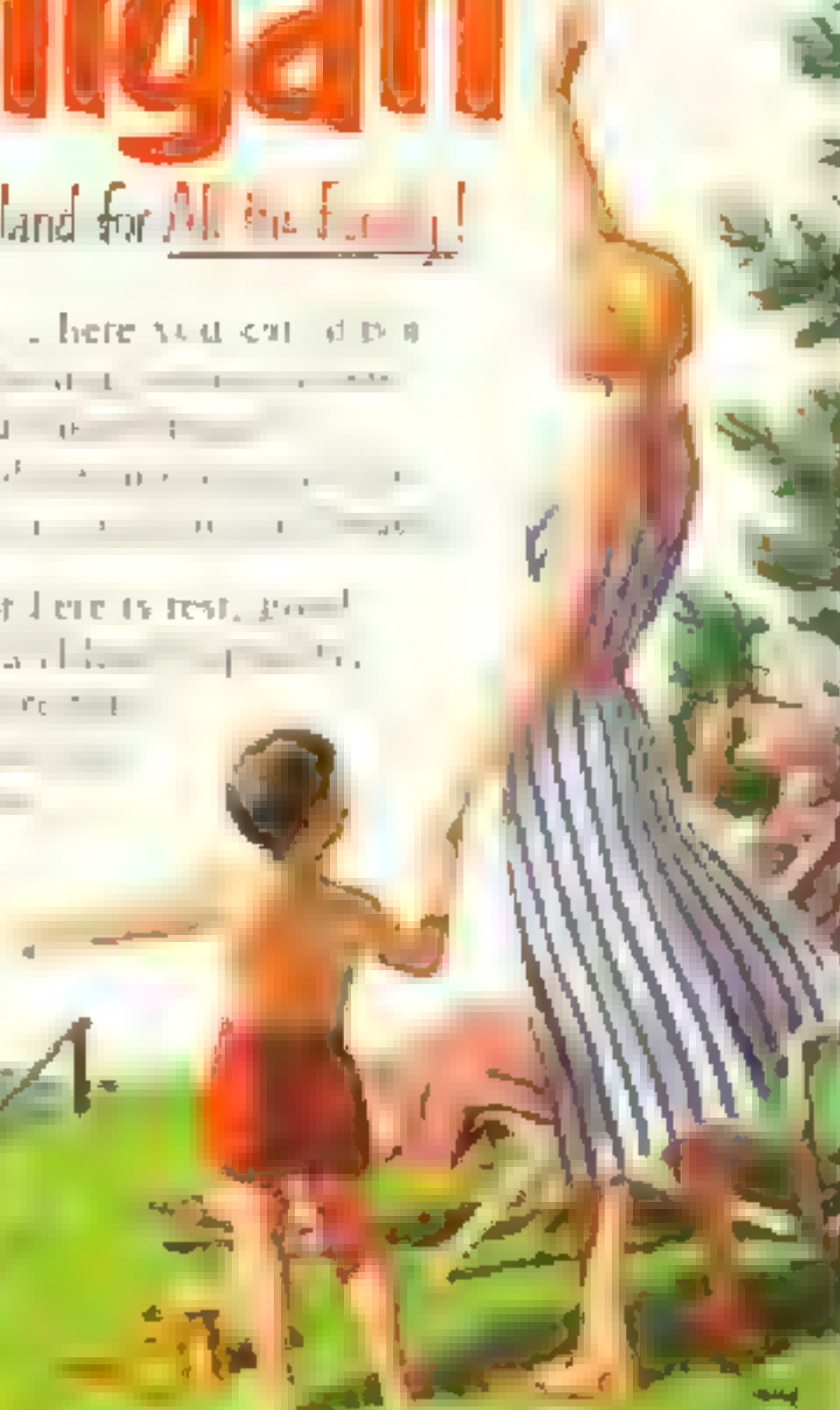
3,500 resorts — from small
cabins to big hotels



Michigan

America's Finest Vacationland for All the Family!

- Magnificent Michigan — here you can enjoy the world's most beautiful scenery, clean air, pure lakes, and the finest fishing, boating, and swimming. You'll find the most beautiful places in America, and the best of everything in the world.
- Visit Lake Michigan — for here is rest, good food, and the finest of everything. You'll find the best of everything in the world, and the best of everything in the world.



This Summer enjoy the best for less in

Michigan Water Wonderland

Write to: The Michigan
Room 11, Capitol Building, Lansing 3, Michigan.
I want to know more about Michigan
Water Wonderland.

Name

Address

City & State



There are so many wonderful places to
visit in Michigan that it is hard to
choose. But you can't visit them all.
So you'll want to visit the most
beautiful places in Michigan.

MICHIGAN TOURIST COUNCIL



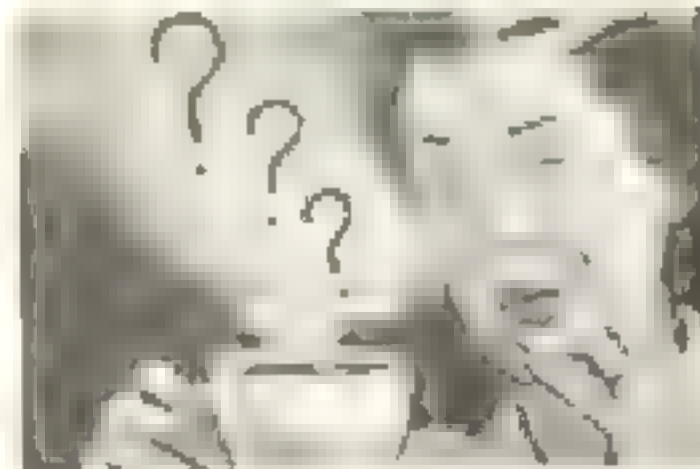
Can coffee put a marriage on the rocks?



1. Many a family squabble goes back to the night before—goes back to loss of sleep. Toss-and-turn nights leave nerves on edge, dispositions shaky!



2. And often back of that sleeplessness is the callout in coffee. You're on your nerves, dreading the wrong side of the bed in the morning!



3. You ask yourself: "Should I drink down my favorite beverage—or should I give up coffee entirely? Just what is a person to do?"



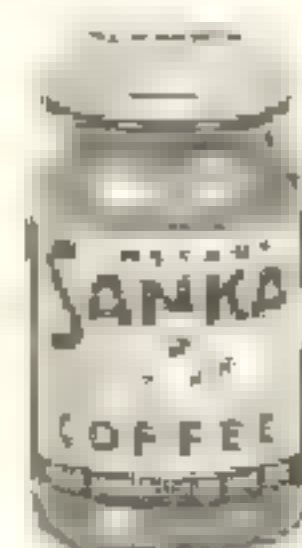
4. Do? Just switch to Sanka Coffee. Sanka is all water—real coffee. Rich, full bodied—with only the necessary caffeine removed! You can drink cup after cup without the slightest "jitters."



5. Precious sleep and precious peace of mind—both yours!—are yours again. Sanka Coffee is the only instant coffee that keeps you up at night and gets you your precious sleep in the morning.

Sanka Coffee

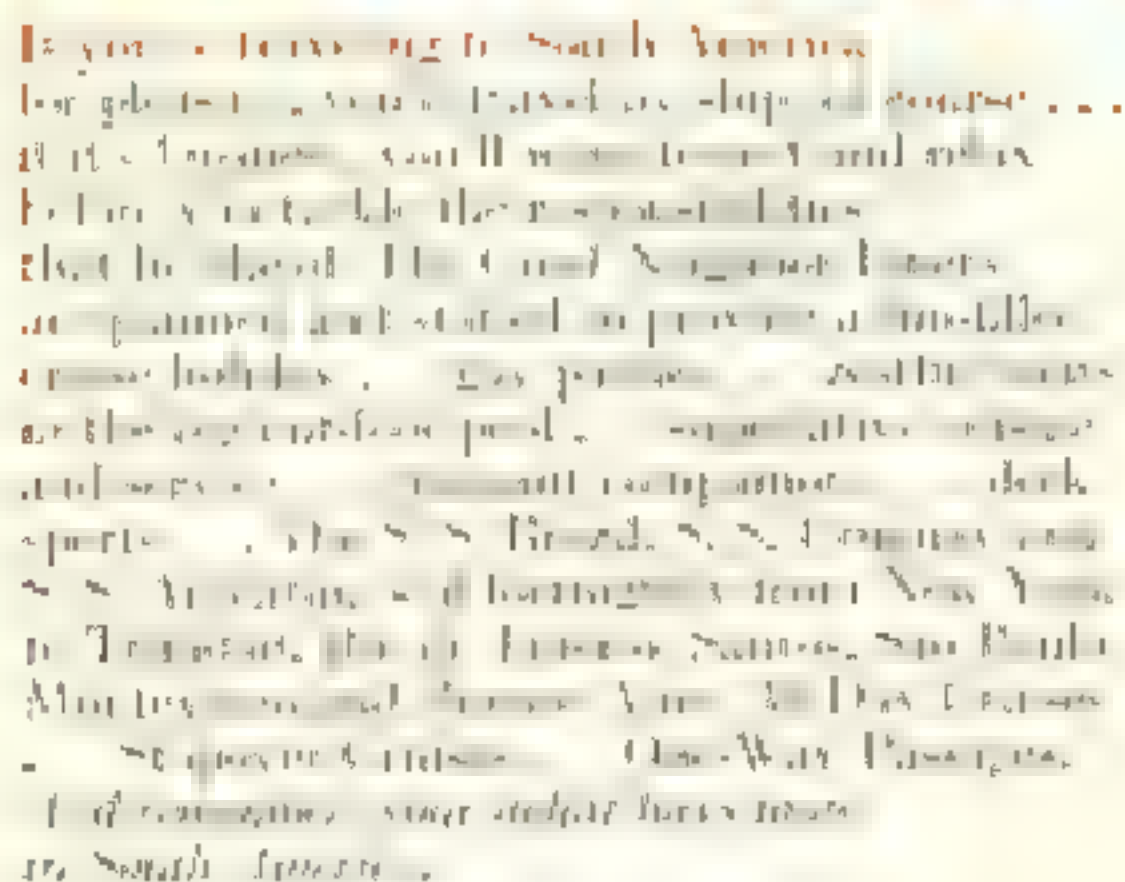
Instant Sanka
is the only
instant coffee
that's
caffeine-free



Real coffee with the worry taken out Drink it and sleep!

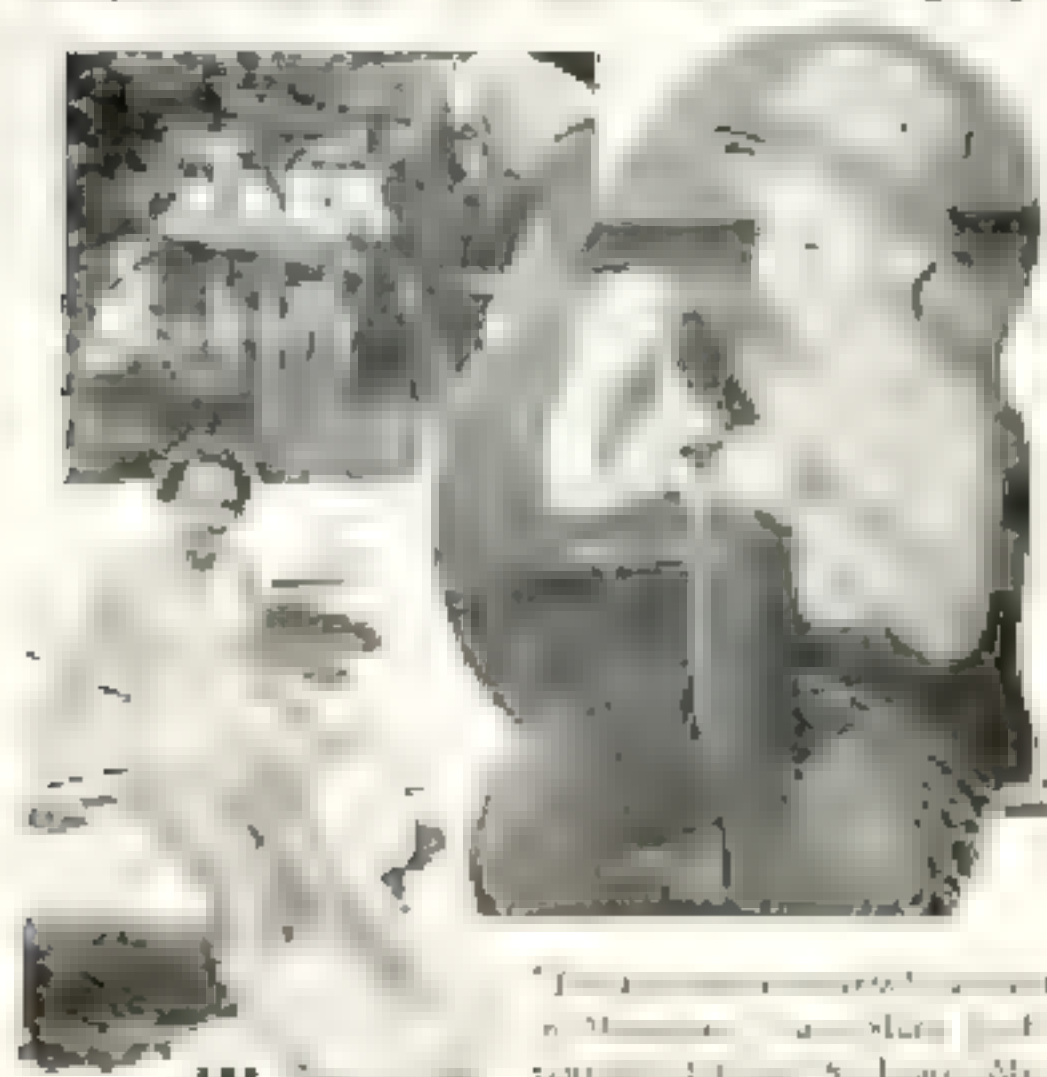
Product of General Foods

Mention the National Geographic—It identifies you



OFFICE OF THE STATE CLERK OF THE DISTRICT OF COLUMBIA

MORE FUN IN '51



IN MINNESOTA Land of 10,000 Lakes

So much to see and do... Enjoy it all at 10,000 lakes and 100,000 miles of shoreline. Freshwater lakes. TEN OF THE WHOLE FAMILY* take to the water. Fishing, boating, swimming, sunbathing, picnicking, and more. All in the heart of Minnesota. This year, **CLIQUE MINNESOTA!**



FREE

Get a free brochure about Minnesota's lakes and outdoor recreation. It's yours for the asking. Write to: **MINNESOTA TOURIST INFORMATION, DEPT. CC-10, STATE CAPITOL, ST. PAUL, MINN.**

TOURIST INFORMATION, DEPT. CC-10
STATE CAPITOL, ST. PAUL, MINN.

NAME

ADDRESS

CITY ZONE STATE

MAIL THIS COUPON TODAY

Member of the National Tourist Information Council

Year in and year out you'll
do well with the HARTFORD



— all forms of fire, marine
and casualty insurance and
fidelity and surety bonds.

See your Hartford agent or insurance broker

**HARTFORD FIRE
INSURANCE COMPANY
HARTFORD ACCIDENT
AND INDEMNITY COMPANY
HARTFORD LIVE STOCK
INSURANCE COMPANY
HARTFORD 15, CONNECTICUT**

*Your Complete Western
Vacation IN ONE PACKAGE*

**PIKES
PEAK
REGION**



Discovering America's
spot of "American"
Scenic beauty and historic interest... Pikes Peak Region...
The Pikes Peak Region...
The Pikes Peak Region...
The Pikes Peak Region...

Large dining room, open at night, of course...
Spacious and comfortable...
The Pikes Peak Region...

Colorado Springs
and MANITOU SPRINGS
at the foot of **PIKES PEAK**

COLORADO SPRINGS CHAMBER OF COMMERCE
101 Pikes Peak Ave., Colorado Springs, Colo.
Telephone 444-4444 (Area 719) 444-4444
Name
Address

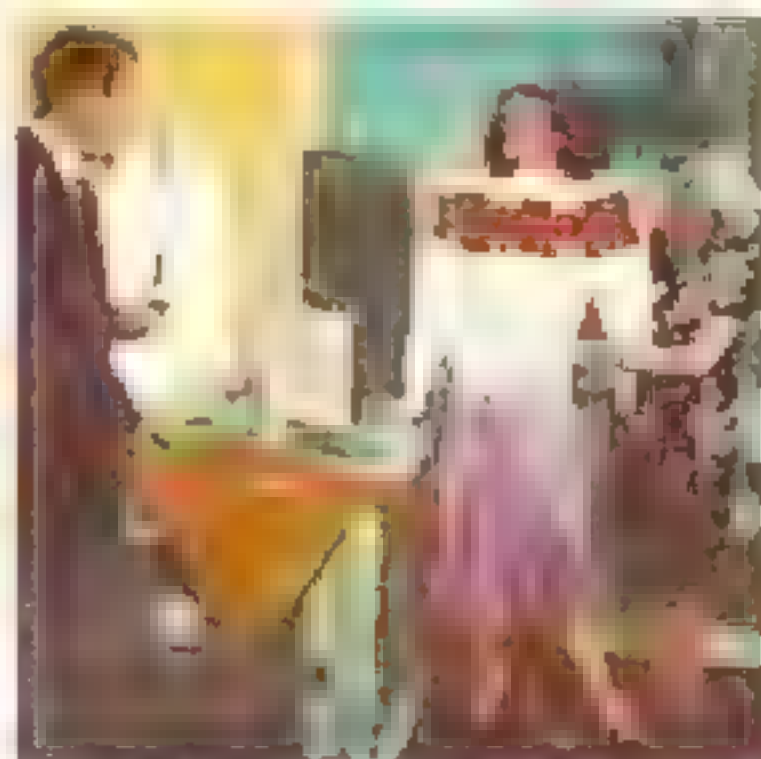
AVERAGE SUMMER TEMPERATURE 80°

Find vacation variety in Canada

ENJOY LIFE ON A LAKE AGAINST AN EYE-FILLING BACKGROUND OF NATURAL BEAUTY



Just as you can enjoy the beauty of a lake, you can enjoy the beauty of a forest.



Colorful displays of art and nature are available in many of our National Parks.

For you, you can find a new kind of "rest-up" vacation in Canada's inspiring green spaces. Maybe you've been promising yourself to drop in on over-the-border relatives or friends, to relax and relax in great National Parks, perhaps get candid close-ups of protected wild life. In Canada, there's something for everyone. You will take in the sights, spend a weekend, find friendly people to make you welcome. Make every vacation hour count in Canada.

For more information, call 1-800-367-8888.



Relax in the beauty of a lake, and enjoy the beauty of a forest.



NAME _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

PHONE _____

DATE _____



It's true. All this food—and more—can be placed in the G-E Refrigerator shown below!

25% to 50% more food space

In new, dependable General Electric Refrigerators



Model R-17, 17 cubic feet, 17 cubic feet

G-E Refrigerators give you much more storage space than most old-style refrigerators now in use...yet they occupy no larger floor area!

When you go to buy that refrigerator you need, be sure that it has everything your heart desires!

First, you want ample food space.

You want all the late-fashion conveniences. You want many special features you will find in no other refrigerator.

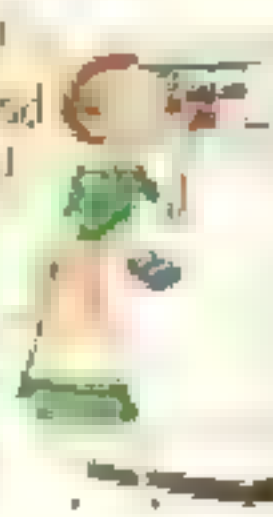
You want an efficient, long-lasting refrigerator. No other refrigerator can surpass the General Electric record for dependability. More than 2,700,000 General Electric Refrigerators with sealed refrigeration systems have been in use 10 years or longer.

See a General Electric today. You'll find it listed in your classified telephone directory. General Electric Company, Bridgeport 2, Conn.

**General Electric
REFRIGERATOR-FOOD FREEZER
COMBINATION**

LOOK!
A REAL food
freezer!

The frozen food compartment is a separate compartment, not a freezer drawer.



Pick ONE side
at a time!

Red-Cube Ice Trays. Pick and choose what you want to freeze. No more ice cubes.



No more
defrosting!

Frost does not build up on the food compartment. No more defrosting!



You can put your confidence in—

GENERAL ELECTRIC



TWO GREAT VACATION ATTRACTIONS...



The Olympian HIAWATHA



The Pacific Northwest

The farther you go, the more important the trip itself. Enjoy every minute from dawn to deep sleep on the Olympian HIAWATHA. It offers grand scenery, friendly service and varied accommodations from de luxe private rooms to comfortable Touralux sleepers and lowest cost Luxorest coaches.

Vacation attractions from Yellowstone to Puget Sound are equally diverse. Explore cosmopolitan Seattle or ride sky line trails; swim on Pacific Ocean beaches

or visit snow-clad Mt. Rainier; go ferry or steamer cruising to the Olympic Peninsula or nearby Victoria and Vancouver.

H. Sengstacken, The Milwaukee Road
703 Union Station, Chicago 6, Ill.
Please send folders on ☐ Yellowstone
☐ Pacific Northwest ☐ Yellowstone-Salt
Lake City ☐ Yellowstone-Colorado
☐ Pacific Northwest-California ☐ Pacific
Northwest-Canadian Rockies.

Name _____

Address _____

City _____ Zone _____ State _____



THE MILWAUKEE ROAD

Mention the National Geographic when you write.

As simple as Coqnet blanc & l'Armagnac — As delightful, as friendly, as France itself



Step into an Air France Constellation ... and a new world greets you warmly. Friendly words have a soft French accent. The smart decor matches the brightest mood. And each Air France Constellation provides you with thirty per cent more room. All the space you need for relaxing in your "sky lounge" ... now a club chair, later a "stretch out" lounge. Extra roominess to enjoy in other comfort your aperitif, the rare Coqnet blanc & l'Armagnac, coffee and liqueur.



MISS MARJORIE LAWRENCE
Metropolitan Opera Star

"My many trips to Europe on concert tours have made me an Air France enthusiast. I would fly anywhere and whenever I can on Air France." — *Marjorie Lawrence*

Illustration by [illegible]

go Air France



YOUR MAGIC DOORWAY TO PARIS
... AND ALL THE WORLD
32 YEARS OF OVERWATER FLYING

San Francisco Office: AIR FRANCE, 693 Fifth Avenue, New York 22, New York. London Office: Air France, 100 Strand, London, W.C.2. Houston Office: Air France, 1001 West 19th Street, Houston, Texas. Local Representatives: MONTGOMERY.



PAST *Romance* SPOTLIGHTS MODERN GLAMOUR

You'll find more than a hot summer vacation in San Antonio. You'll see it in the famous Alamo, the Spanish Governor's Palace, our ancient missions and colorful La Villita. You'll see great art boxes and mighty Fort San Houston. You'll stroll to amazing beauty along the Venetian like San Antonio River and in lovely parks and plazas. You'll want to take intriguing side trips to Big Bend National Park, Old Mexico and ranches — the best of all. You'll find your summer vacation in San Antonio will be eternally packed with valuable memories.

Write for free illustrated book.

MUNICIPAL INFORMATION BUREAU

719 Insurance Building
San Antonio 5, Texas

San Antonio

WHERE THE OLD IS OUTSHINING

Re-live centuries of thrills

in *Massachusetts*

A visit to Massachusetts will sweep through the years of our country's history ... at Concord, Lexington, Boston, Plymouth, Boston — where you'll learn and enjoy the story of our country's growth and growth of America. And from the sea westward to the Berkshires you'll enjoy your own reminders of the history of the past in literature, architecture and gracious living.

NINE CAPITALS OF THE PAST

- Plymouth
- Boston
- Concord
- Lexington
- Cambridge
- Salem
- Weymouth
- Nahant
- Andover

NAME _____
ADDRESS _____

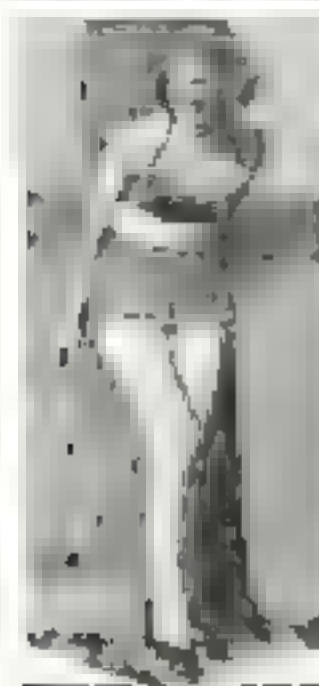
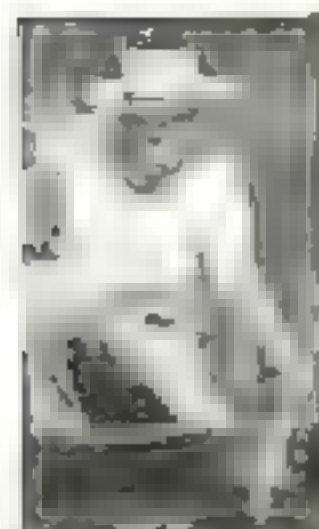
the Swing is to

MISSOURI

THE HEART OF AMERICA



for a **THRIFTY**
Variety Vacation



MISCOURI, abounding with natural beauty and recent soil fertility, offers your whole family full measure of vacation variety and enjoyment... on a shoestring budget!

Right now is a good time to get the facts... and plan to spend your vacation in the Heart of America this year. You'll find plenty to see, plenty to do. Enjoy fishing and swimming in the many lakes and streams. Visit Missouri's giant national, interesting, scenic, many historic places and beautiful state parks.

Free tent accommodations
hotels, courts, cabins and cottages
at reasonable rates. Come to
the "9th & Main" plots for a de-
lightful time at low cost.

Send for FREE Booklet!

The American Society of
 International Law is a
 non-profit organization
 for the study and
 promotion of
 international law.

5545

MISSOURI DIVISION OF
RESOURCES AND DEVELOPMENT
Dept. 42-C Jefferson City, Mo.

Dept. 42-C

Please send me FREE Vegetarian Booklet, and other
literature, on request.

NAME _____

ADDRESS

Before purchasing bedroom and dining room furniture, stop and compare for style, quality, and value. A visit to the Rway show-room will be a convincing experience. No obligation. Show cases may be arranged only through authorized Rway dealers.



1990-1991

Հայկ. ցեղաբան. հոտան. հիւս
1.5.27-1981 (հիւս-1981-01-01) 1.75

45 - 47
 48 - 50
 51 - 53
 54 - 56
 57 - 59
 60 - 62
 63 - 65
 66 - 68
 69 - 71
 72 - 74
 75 - 77
 78 - 80
 81 - 83
 84 - 86
 87 - 89
 90 - 92
 93 - 95
 96 - 98
 99 - 101
 102 - 104
 105 - 107
 108 - 110
 111 - 113
 114 - 116
 117 - 119
 120 - 122
 123 - 125
 126 - 128
 129 - 131
 132 - 134
 135 - 137
 138 - 140
 141 - 143
 144 - 146
 147 - 149
 150 - 152
 153 - 155
 156 - 158
 159 - 161
 162 - 164
 165 - 167
 168 - 170
 171 - 173
 174 - 176
 177 - 179
 180 - 182
 183 - 185
 186 - 188
 189 - 191
 192 - 194
 195 - 197
 198 - 200
 201 - 203
 204 - 206
 207 - 209
 210 - 212
 213 - 215
 216 - 218
 219 - 221
 222 - 224
 225 - 227
 228 - 230
 231 - 233
 234 - 236
 237 - 239
 240 - 242
 243 - 245
 246 - 248
 249 - 251
 252 - 254
 255 - 257
 258 - 260
 261 - 263
 264 - 266
 267 - 269
 270 - 272
 273 - 275
 276 - 278
 279 - 281
 282 - 284
 285 - 287
 288 - 290
 291 - 293
 294 - 296
 297 - 299
 300 - 302
 303 - 305
 306 - 308
 309 - 311
 312 - 314
 315 - 317
 318 - 320
 321 - 323
 324 - 326
 327 - 329
 330 - 332
 333 - 335
 336 - 338
 339 - 341
 342 - 344
 345 - 347
 348 - 350
 351 - 353
 354 - 356
 357 - 359
 360 - 362
 363 - 365
 366 - 368
 369 - 371
 372 - 374
 375 - 377
 378 - 380
 381 - 383
 384 - 386
 387 - 389
 390 - 392
 393 - 395
 396 - 398
 399 - 401
 402 - 404
 405 - 407
 408 - 410
 411 - 413
 414 - 416
 417 - 419
 420 - 422
 423 - 425
 426 - 428
 429 - 431
 432 - 434
 435 - 437
 438 - 440
 441 - 443
 444 - 446
 447 - 449
 450 - 452
 453 - 455
 456 - 458
 459 - 461
 462 - 464
 465 - 467
 468 - 470
 471 - 473
 474 - 476
 477 - 479
 480 - 482
 483 - 485
 486 - 488
 489 - 491
 492 - 494
 495 - 497
 498 - 500
 501 - 503
 504 - 506
 507 - 509
 510 - 512
 513 - 515
 516 - 518
 519 - 521
 522 - 524
 525 - 527
 528 - 530
 531 - 533
 534 - 536
 537 - 539
 540 - 542
 543 - 545
 546 - 548
 549 - 551
 552 - 554
 555 - 557
 558 - 560
 561 - 563
 564 - 566
 567 - 569
 570 - 572
 573 - 575
 576 - 578
 579 - 581
 582 - 584
 585 - 587
 588 - 590
 591 - 593
 594 - 596
 597 - 599
 600 - 602
 603 - 605
 606 - 608
 609 - 611
 612 - 614
 615 - 617
 618 - 620
 621 - 623
 624 - 626
 627 - 629
 630 - 632
 633 - 635
 636 - 638
 639 - 641
 642 - 644
 645 - 647
 648 - 650
 651 - 653
 654 - 656
 657 - 659
 660 - 662
 663 - 665
 666 - 668
 669 - 671
 672 - 674
 675 - 677
 678 - 680
 681 - 683
 684 - 686
 687 - 689
 690 - 692
 693 - 695
 696 - 698
 699 - 701
 702 - 704
 705 - 707
 708 - 710
 711 - 713
 714 - 716
 717 - 719
 720 - 722
 723 - 725
 726 - 728
 729 - 731
 732 - 734
 735 - 737
 738 - 740
 741 - 743
 744 - 746
 747 - 749
 750 - 752
 753 - 755
 756 - 758
 759 - 761
 762 - 764
 765 - 767
 768 - 770
 771 - 773
 774 - 776
 777 - 779
 780 - 782
 783 - 785
 786 - 788
 789 - 791
 792 - 794
 795 - 797
 798 - 800
 801 - 803
 804 - 806
 807 - 809
 810 - 812
 813 - 815
 816 - 818
 819 - 821
 822 - 824
 825 - 827
 828 - 830
 831 - 833
 834 - 836
 837 - 839
 840 - 842
 843 - 845
 846 - 848
 849 - 851
 852 - 854
 855 - 857
 858 - 860
 861 - 863
 864 - 866
 867 - 869
 870 - 872
 873 - 875
 876 - 878
 879 - 881
 882 - 884
 885 - 887
 888 - 890
 891 - 893
 894 - 896
 897 - 899
 900 - 902
 903 - 905
 906 - 908
 909 - 911
 912 - 914
 915 - 917
 918 - 920
 921 - 923
 924 - 926
 927 - 929
 930 - 932
 933 - 935
 936 - 938
 939 - 941
 942 - 944
 945 - 947
 948 - 950
 951 - 953
 954 - 956
 957 - 959
 960 - 962
 963 - 965
 966 - 968
 969 - 971
 972 - 974
 975 - 977
 978 - 980
 981 - 983
 984 - 986
 987 - 989
 990 - 992
 993 - 995
 996 - 99

SOUTH DAKOTA'S
BLACK HILLS
Your Haven of Summer

WRITE for colored
 FREE FOLDER

South Dakota
 STATE HIGHWAY COMMISSION

WHITE Not colored
FREE FOLDED

South Dakota
STATE HIGHWAY COMMISSION
A. H. FANLOW, P.O. Box 1, Pierre, S. D.



Enjoy a down-east vacation

in Canada's

Provinces by the Sea

...one of Canada's 10 top Maple Leaf vacations



Play in the surf, or on the sand at one of Canada's 100 best beaches. Enjoying the sun and the sea, you'll find the perfect vacation spot in the provinces by the sea.



Visit Edward Island, the only province with a complete coastline. Enjoy the scenic beauty of the island, from the rolling hills to the charming villages. It's a perfect vacation spot in the provinces by the sea.



Go adventuring in the provinces by the sea. From the rugged coastlines of the Atlantic to the peaceful bays of the Gulf, there's something for everyone. It's a perfect vacation spot in the provinces by the sea.



Provinces by the Sea

You'll find the perfect vacation spot in the provinces by the sea. From the rugged coastlines of the Atlantic to the peaceful bays of the Gulf, there's something for everyone. It's a perfect vacation spot in the provinces by the sea.



SERVING ALL 10 PROVINCES OF CANADA

For more information, contact your local Canadian National Railways agent. They'll be happy to help you plan your perfect vacation in the provinces by the sea.



It's more fun in Switzerland!

Sun-tanning!

Soak up the sun - while you're drifting on palm-fringed lakes or exploring sunny Alpine trails. In four hours, Switzerland's fast electric trains will whisk you almost anywhere in this gay and friendly country. And you save up to half on special Swiss travel fares.



Skiing!

Enjoy Switzerland's magnificent spring sking - on perfect groomed slopes in the sunny areas of the Alps. In fact, Switzerland is the only country in the world where you can ski in the summer as well as in the winter. And you can take the fast electric trains to the ski areas in just a few hours.

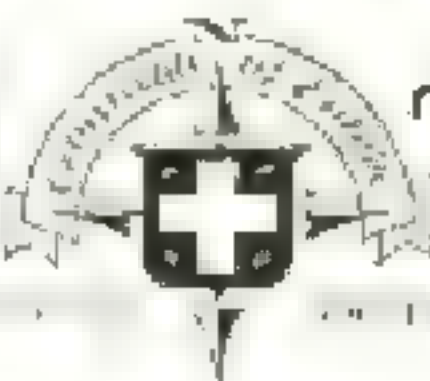


Relaxing!

Swiss evenings are full of relaxation at cozy lakeside restaurants or in the mountains. You can dine on fine food and drink fresh mountain wine and beer in the Alps. You can live as comfortably as at home!

The man to know before you go
is your Travel Agent!

Swiss National



Tourist Office

470 E. 4th Ave., New York 17, N.Y.

1001 Market Street, Chicago, Ill.

Phone: MU 2-1100

CH 1-2611, Ext. 1000-1002

Mention the National Geographic in your travel plans.

on
Columbia
(4)
Records



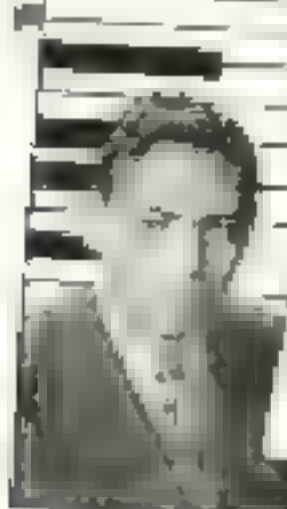
Fledermaus



New York, N. Y. 10001
New York, N. Y. 10001
Phone: West 44-1100
South 44-1100, Bklyn. 44-1100

Figure 1. The effect of the concentration of the solution on the adsorption of the dye.

THE METROPOLITAN OPERA ASSOCIATION

[illegible]

OSCAR LEVANT

GERSHWIN
RHAPSODY IN BLUE

Les SYLPHIDES
BALLET

**Don't Miss These Outstanding Medical Events
Your Dealer Is Featuring Them Now!**

COLUMBIA
RECORDS

Abstract

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

[illegible]

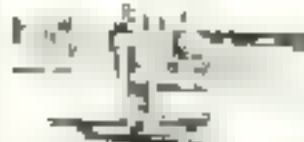
RELAX and RECUPERATE at
HOT SPRINGS
NATL PARK ARKANSAS

[illegible]

Huntington

We have 200 people on board, about 100 of us are out of prison, and 100 are still in the cell.

Atlantic City



1

10

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

VACATION HEADQUARTERS

VACATION HEADQUARTERS — The 1000-bed, 13-building resort is located on the shores of Lake Michigan.

1. *Journal of the American Medical Association*, 1997; 277: 100-105.

WILLIAM H. WILSON
Vice President
General Manager
The Wilson Company

100%
 100%
 100%

The French name
 for the whole
 "Soleil d'été" was
 the "été d'été"
 of the French

SUNSET LIMITED

New Orleans-Los Angeles

Over the next 100 years, the world's population will grow from 6 billion to 10 billion. That's a lot of mouths to feed. So, how do we make sure we have enough food to feed everyone? Well, we need to find ways to grow more food. One way is to use new technologies, like genetic engineering, to create crops that are more resistant to pests and diseases. Another way is to use sustainable farming practices, like crop rotation and organic fertilizers, to keep the soil healthy and productive. And finally, we need to make sure we have enough water to grow our crops. That means building dams and irrigation systems to store and distribute water. It's a big challenge, but if we work together, we can make sure everyone has enough to eat.

In the month of November 2000, a series of 100 photographs were taken of the 100 most important buildings in the city, and the results are shown in Figure 1. The photographs were taken from a distance of 100 meters, and the buildings were arranged in a grid pattern. The photographs were taken from a distance of 100 meters, and the buildings were arranged in a grid pattern. The photographs were taken from a distance of 100 meters, and the buildings were arranged in a grid pattern.

Environmental concerns that stem from the East and North present a demand for cooperation in New Orleans.

Concerning the passage of all other railroads, the
only difference is that the new freight and passenger
equipment is kept in the new collection of new freight
lines, and not in the old lines serving the West. (See
map on the left of the train below.) Write Mr. L. C. Jacy,
Dept. 11, Southern Railway, 1005 Morgan Avenue,
Chicago, Ill., telling how you want it. It will gladly
send you the information you desire and estimate.



AMERICA'S MOST
MODERN TRAINS



GREAT SOUTHERN PACIFIC TRAINS

EC - 14175

44BP 2211

1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 26

מספר קב"צ 1 רצח-1981

© 1997 by John Wiley & Sons, Inc.

3. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

E-mail: elise@cs.cmu.edu

— 內政部 財政部

[illegible]

Page 1 of 1

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

5. **Financial Policy:** The company's financial policy is to maintain a strong balance sheet and to invest in growth opportunities. The company's financial performance is strong, with a consistent record of profitability and a strong cash flow. The company's financial policy is to maintain a strong balance sheet and to invest in growth opportunities.



"Hex" marks the spot!

Looking for a magic vacation? Plan now to visit Pennsylvania. Along the way you'll see the decorated barns of the Pennsylvania Dutch with the brilliant displays called *houselights*. You'll see historic sites of the Revolution and Civil War, rising majestically, sparkling lakes. Forests that mean fun: You'll enjoy swimming, canoeing, fishing, and other vacation sports that are just at this world. Try it this summer. For a selection of brochures and folders, write to the Pennsylvania Department of Commerce, 100 North Second Street, Harrisburg, Pa. 17102. Or write to the Pennsylvania Department of Commerce, 100 North Second Street, Harrisburg, Pa. 17102. Or write to the Pennsylvania Department of Commerce, 100 North Second Street, Harrisburg, Pa. 17102.

YOU'LL FIND MORE IN
Pennsylvania
JOHN J. BART
Governor
MICHAEL J. CANTOR
Secretary of Commerce

PENNSYLVANIA DEPARTMENT OF COMMERCE
ONE EIGHT TWO JEFFERSON AVENUE, PA.

I would like to learn more about Pennsylvania travel and trade.
Please send me your free brochure.

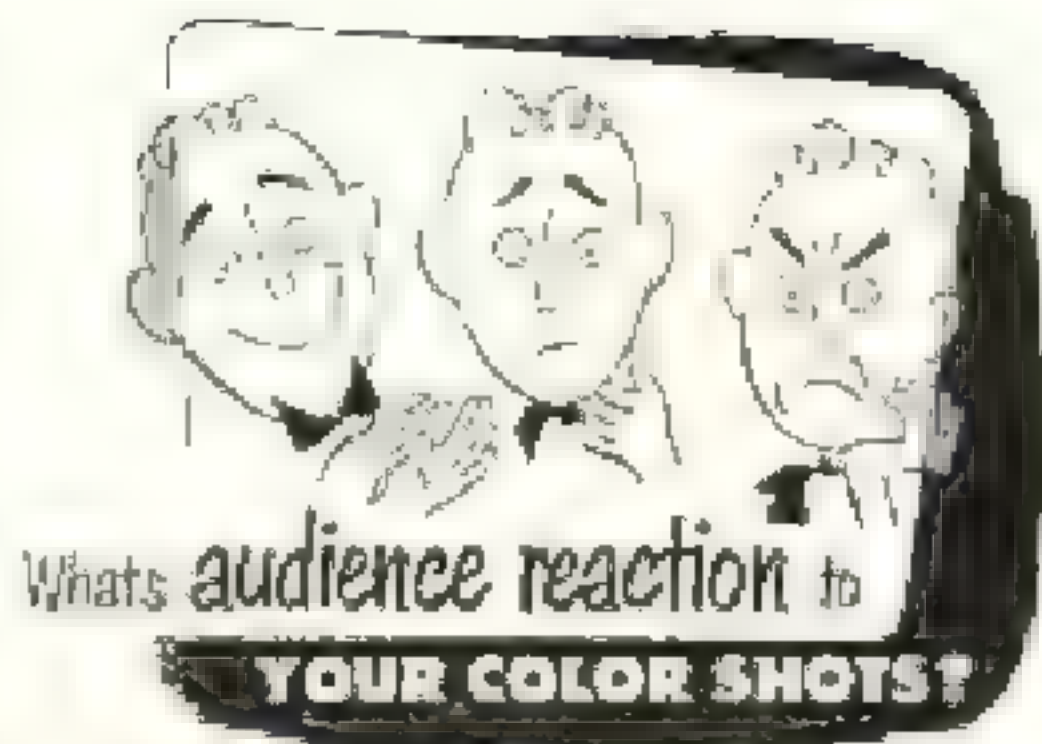
Name _____

Address _____

City _____

State _____

Zip _____



Strong colors are just ahead. With your color shots, it may be late but because your colors are true and you like them, you can't help but expect: Critical color kind from the forced to advise! Why don't you get a Weston? A Weston is a true, accurate, reliable and assures correctly exposed pictures with all cameras, all film. Sold by all leading photo dealers.



WESTON

EXPOSURE METERS

The meters most photographers use



Dept. T-490 - Dept. of Public Relations
State House • Indianapolis, Indiana

Name _____

Address _____

City _____

State _____

Zip _____



The performance of Budd D-series steel has shown that it is the most durable, best all-aroundness of 14 to 14½ lb per sq ft with 13 to 14 mpg, low, low fuel consumption, low maintenance and the most solid construction.

Railroads have found they can use these cars for many years and millions of miles, and they have found that they can use these cars for many years and millions of miles.

The most durable, best all-aroundness of 14 to 14½ lb per sq ft with 13 to 14 mpg, low, low fuel consumption, low maintenance and the most solid construction. The most durable, best all-aroundness of 14 to 14½ lb per sq ft with 13 to 14 mpg, low, low fuel consumption, low maintenance and the most solid construction.

Another reason Budd steel is the best of all is its proven transportability, proven as soon as jobs in the field are done. The steel is made by the steel industry, and it is the best of all is its proven transportability, proven as soon as jobs in the field are done.

D II
Budd

PIONEERS IN BETTER TRANSPORTATION

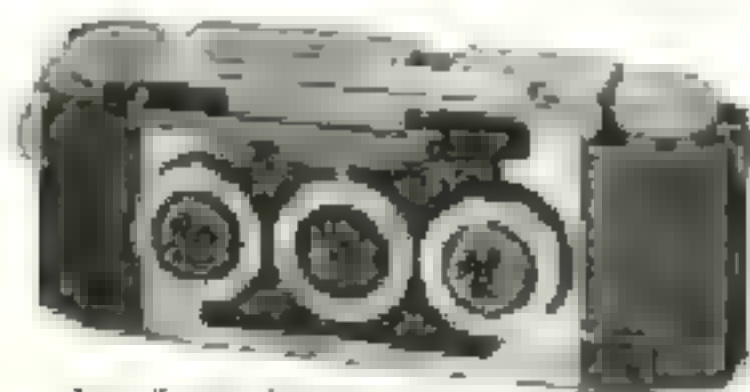
PREFER THE **Stereo Realist**
THE CAMERA THAT PUTS 3RD DIMENSION ON FILM



Ruth Roman

Kuth Koman Warner Bros. Star
 good to be seen in **LIGHTNING STRIKES TWICE**
 a Warner Bros. Production

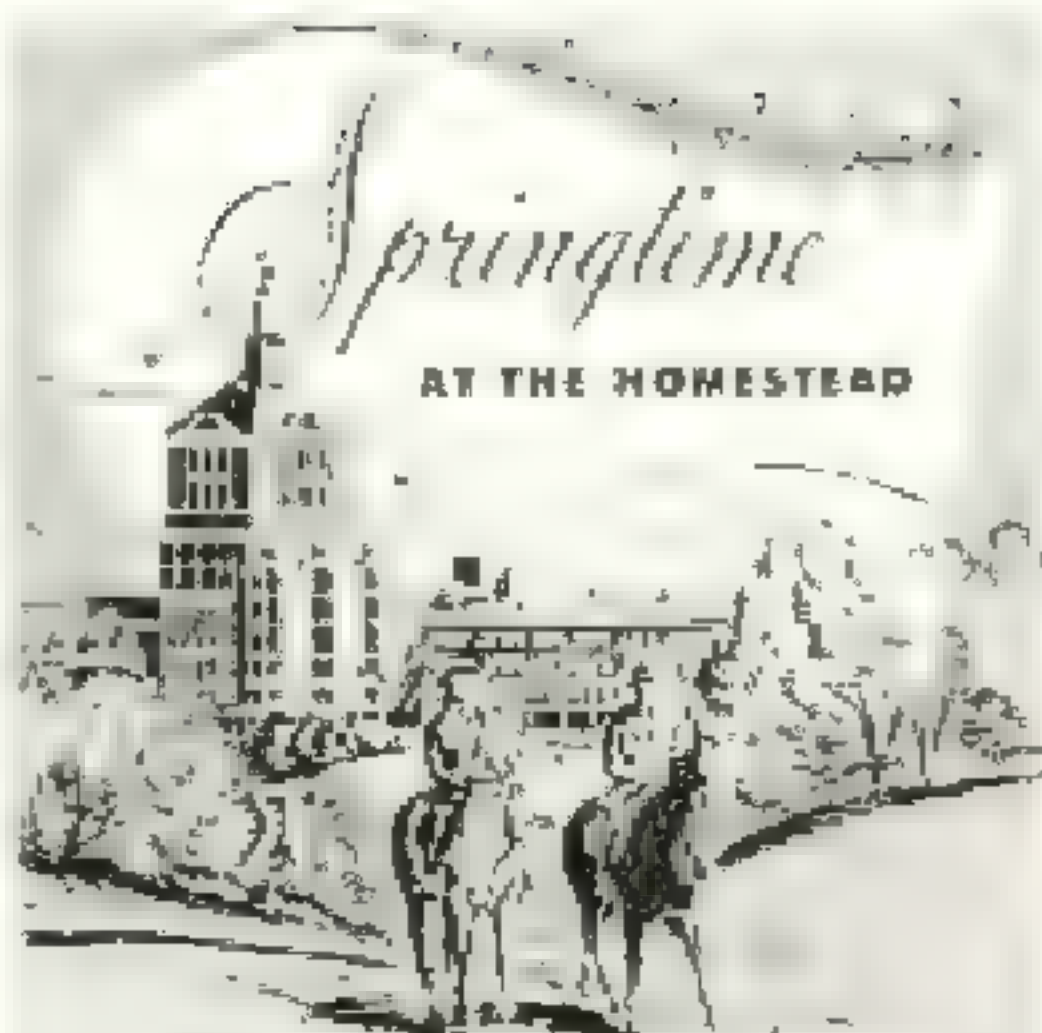
says: It's fascinating! My REALIST makes the most beautiful pictures I've ever taken. They're so real . . . and it's so easy!



1. *Phragmites australis* (Cav.) Trin. ex Steud.

STEREO Realist

THE CENTER THAT HAS THE SAME IS 100



Experienced visitors agree the one classic location is all the American need. The Hammond's magnificent 1,000-acre estate in the Virginia Appalachians. Come and enjoy the traditions of great Spring season at this famous place - the sports, the relaxation, the gay social scene. Write for illustrated folder and rates.

The HOMESTEAD
HOT SPRINGS, VIRGINIA

For Inquiries, President Frank H. Briggs, Con'l. Mgr.



...PREVIEW OF A GRAND VACATION

A big, colorful book about Tennessee . . . 40 informal yet pages, with 91 illustrations and a double-page map. Here is Tennessee . . . from the cottonwood-lined Mississippi to the Great Smoky Mountains . . . beautiful lakes, rivers and streams, hills and fertile valleys, miles of scenic drives over smooth paved highways.

Write for post free copy of the "Secret Book"
a postal note will do

DIVISION OF STATE INFORMATION
 617 State Office Building • Nashville 2, Tennessee
 A Division of the Department of Conservation



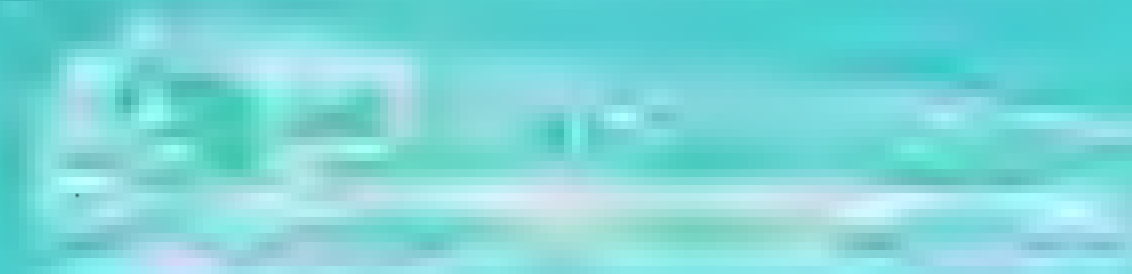
The turquoise room is located in the lounge car on the Super Chief. Next to the dining car.

Now available

to entertain a group of your friends privately, en route, in the Turquoise Room aboard the new Super Chief ... the only private dining room on rails in the world. It is one of many features that distinguish this great new train. *Daily service between Chicago and Los Angeles*

new Super Chief

Super Chief is a registered trademark of the Santa Fe Railway Company. © 1964 Santa Fe Railway Company. All rights reserved.



for every grass-cutting need
a big **V-E-C**

YES

YES

For any size, from 14 models!

YES

For training:
3 rear-drive types:

YES

For open lawns:
4 side-wheel models!

YES

For both grass and weeds?
7 rotary disc mowers!

YES.

**Quality construction?
Ask any owner!**

YES

Top for 30 years!

YES

Declares the country over

JACOBSEN MANUFACTURING COMPANY
RACINE, WISCONSIN

Jacobsen
WORTHINGTON
POWER MOWERS

JACOBSEN MANOR

21. What are the main

**JACOBSEN-WORTHINGTON
ROTARY DISC MOWER**

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

See your October-Worthington dealer
or write Dept. 24

See America First

...and see more on
Great Northern
Streamliners

- **Class on National Park in Wisconsin**
- **Stroke and the Aging: Inland Edition**
- **Fugal Sound, Rooms and Rooms**
- **Vancouver and Victoria in Canada**
- **Mount Rainier in the Cascades of Washington**
- **Pathways, Gateway to Courtenay**

[illegible]

L. J. B. S.

71.41 5.4

1. 275

Every Reason says Spring's the
Season for **Miami Beach**

[illegible]

This Material is Provided and
Published by the City Government of Miami Beach

Mention the National Geographic—It stimulates you



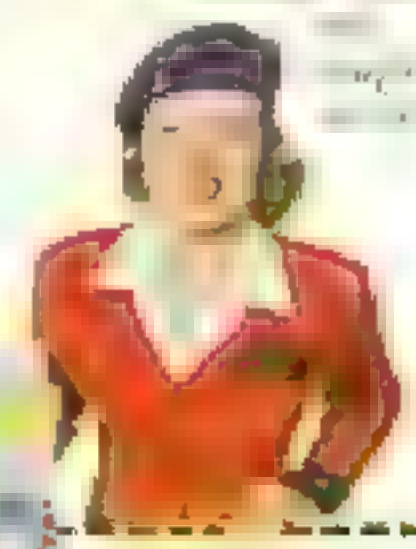
Glorious Fun and Relaxation
Bring the folks to...

Ontario

CANADA'S VACATION PROVINCE

Come one, come all—to Ontario! It's within easy driving distance... and loaded with fun! In 52 joy-packed Playgrounds, you'll find holiday sport to please all the family. For Dad, there are rousing battles in swift trout streams... golfing on well groomed courses. And Mom!—Ontario's just the place for carefree fun and relaxation. Give the kids a swell vacation, too! Swimming, boating, tennis and all sorts of grand times keep them always "on the go". So this year, plan to bask in that wonderful holiday hospitality you've heard about—in Ontario. And remember—shopping treasures wait for you in inviting shops and stores.

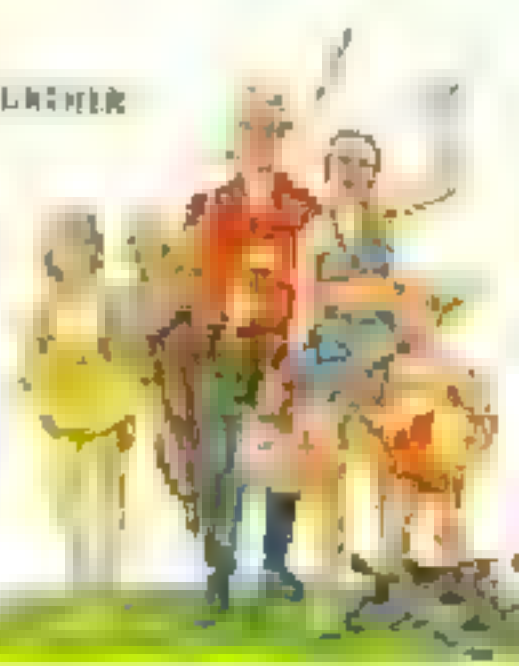
Let's make this year's vacation a memorable one. Write to us now for a free information packet about Ontario.



WHERE YOUR VACATION DOLLAR GOES FURTHER

TRAVEL TIPS

- A local tourist information center will help take home lots of ideas and directions
- 13 Reception Centres at border crossing points offer every kind of tourist service



| | |
|---|---|
| 1 | Ontario Travel |
| 1 | 1201 Parliament Ridge |
| 1 | Toronto 7 Ontario |
| | Please send me free information about Ontario |
| 1 | Name..... |
| 1 | Street..... |
| 1 | City..... State..... Zip..... |



TRAVEL QUIZ—CHECK BELOW WHICH WESTERN VACATION DO YOU WANT?

[YELLOWSTONE? You'll snap pictures of seething geysers, bubbling hot springs, playful bears. Go North Coast Limited to the Park—choose from three exciting gateways!

[CALIFORNIA? You'll swim in the surf, bask on sunny beaches. To add extra thrills, extra nights to your trip, have your Travel Agent route you via NP through the great Pacific Northwest.

[DUDE RANCH? You'll spend lazy days in the saddle, enjoy warm Western hospitality at rodeos, square dances. It's the same friendly atmosphere you'll find on NP trains.

WHATEVER VACATION you want you'll find just the place to go in America's most versatile vacationland. You'll find the comfortable, convenient way to get there is via the streamlined North Coast Limited!

For free vacation folder, write: G. W. Rodine, 517 Northern Pacific Railway, St. Paul 1, Minn. Indicate type of western vacation you want.



NORTHERN PACIFIC RAILWAY
Main Street of the Northwest

Where your freight is treated
like a very important passenger.



Visit the city of
Quebec—where all summer sports await their host
—where you will be welcomed with hospitable Canadian
—and in comfortable quarters with local

LA PROVINCE DE
Québec



Vacation in
MONTANA'S
Scenic Places—Among Friendly People

For more information, write to:
Montana Highway Department
Helena, Montana

MAIL
for free
vacation
information

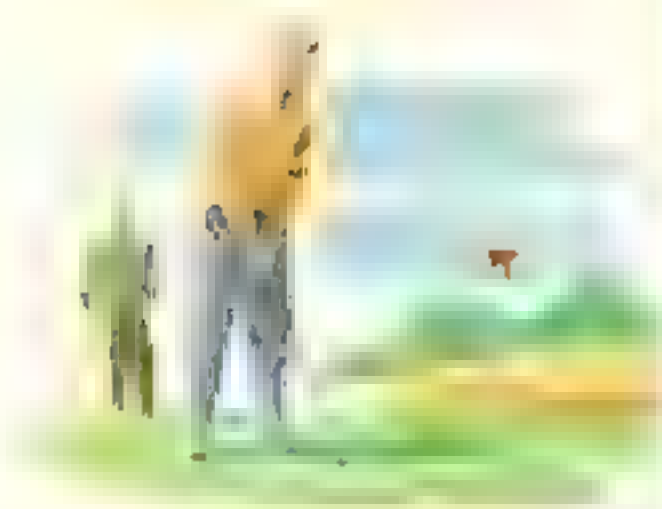


Addressing Envelope: Montana Highway Department
Helena, Montana
Please enclose return address
NAME _____
ADDRESS _____

**SEE IT IN GLACIER AND
YELLOWSTONE PARKS**

YOU'LL Remember

Oregon!



With its rugged coastline, rolling hills, and vast forests, Oregon offers a unique blend of natural beauty and outdoor recreation. Whether you're looking for a quiet retreat or an adventurous getaway, Oregon has it all.



Experience the beauty of Oregon's coastline and its many small towns and villages. Each one offers a unique character and charm.

SEE ALL OF Oregon

BY TRAIL, AND SCENIC HIGHWAYS



BECAUSE OF ITS TUNED-UP VARIETY of scenic views, Oregon is a great destination for anyone who wants to see the best of the Pacific Northwest. From the rugged coastline of the Oregon Coast to the rolling hills of the Willamette Valley, there's something for everyone. And with its many small towns and villages, Oregon offers a unique blend of natural beauty and outdoor recreation. Whether you're looking for a quiet retreat or an adventurous getaway, Oregon has it all.

Take a scenic drive through Oregon's many small towns and villages. Each one offers a unique character and charm.

Name _____
Address _____
City _____ State _____
Zip _____



"Universal" design,
with modern top, modern
base.

MORE Than a NEWLY STYLED Bookcase! ... a Repository for Souvenirs and Keepsakes

GLOBE-WERNICKE smartly designed bookcases offer safe harbor and full vision for collections, souvenirs, relics and keepsakes, as well as treasured books. An additional use was discovered long ago by discriminating choosers of "the original" sectional bookcase.

Smooth-sliding glass doors afford full, clear vision with convenience and flexibility. Models with recessed doors harmonize agreeably with former designs. Your choice of modern, conventional or leg base, with matching tops. Open end styles have hinged glass doors, or open fronts.

Warm rich grains of genuine or imitation Walnut and Mahogany, and Softone or Quartered Oak, are enduringly preserved by skillful hand-rubbed finish.

Leading quality furniture and office equipment stores are proud to show these distinguished styles. Illustrated literature and dealer names sent promptly at your request.



Welcome
to historic

Williamsburg
VIRGINIA

Plan now to visit restored Williamsburg—where Washington, Jefferson and Patrick Henry championed our Freedom. You'll enjoy the leisurely tour of famous buildings and gardens, trips to James' town, Yorktown and nearby plantations. Also golf, tennis, cycling. Fine lodgings in modern hotels, colonial guest houses and restored taverns.

Williamsburg Lodge • Double from \$10 • Single from \$5
Williamsburg Inn • Single from \$6 • Double from \$12



To help you plan
your family's
vacation in

**NEARBY
NOVA
SCOTIA**



Discover the pleasures of Nova Scotia's unspoiled scenery, fine beaches, fresh fish, comfortable accommodations. This booklet is a must for anyone who plans to visit Nova Scotia with its beautiful scenery, historic sites, and world-famous seafood. It also includes information on hotels, camps, cottages and more. It's a free booklet that will help you plan a most enjoyable vacation in the most beautiful province in Canada.

Obtain from Bureau by Eastern Hemisphere Lines

| | | |
|--|--|--|
| | | NOVA SCOTIA
Bureau of Information
P.O. Box 130 Halifax, Nova Scotia
CANADA |
| Name _____
Street _____
City _____
State _____
Zip _____ | | New York Office: 110 Park Ave., New York 17, N.Y. |

Look up...
look down...
look all around!



Roomy, restful coaches



Congenial companionship



Delicious meals



Thoughtful service

RIDE THE VISTA-DOME *California Zephyr*

CHICAGO • DENVER • SALT LAKE CITY • SAN FRANCISCO

Magnificent mountain vistas you can really see! Snow-capped splendors in the colorful Colorado Rockies and California's Feather River Canyon during daylight hours. The most enjoyable ride between Chicago and California!

Vista-Domes for all passengers. Private rooms, lowers, uppers and reserved reclining coach seats. Through sleeping cars daily, between New York-San Francisco. Make reservations at any railroad ticket office or travel bureau.

THE MOST TALKED-ABOUT TRAIN IN THE COUNTRY

Includes Southern California via San Francisco without extra charge

BURLINGTON
A. C. Stephens, Jr.
Passenger Traffic Mgr.
Chicago, Illinois

SIO GRAND
H. F. Eno
Passenger Traffic Mgr.
Denver, Colorado

WESTERN PACIFIC
Jas. G. Wheeler
Passenger Traffic Mgr.
San Francisco, Calif.

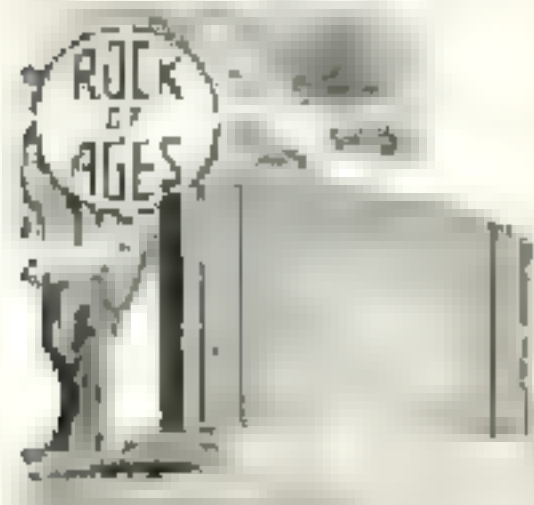
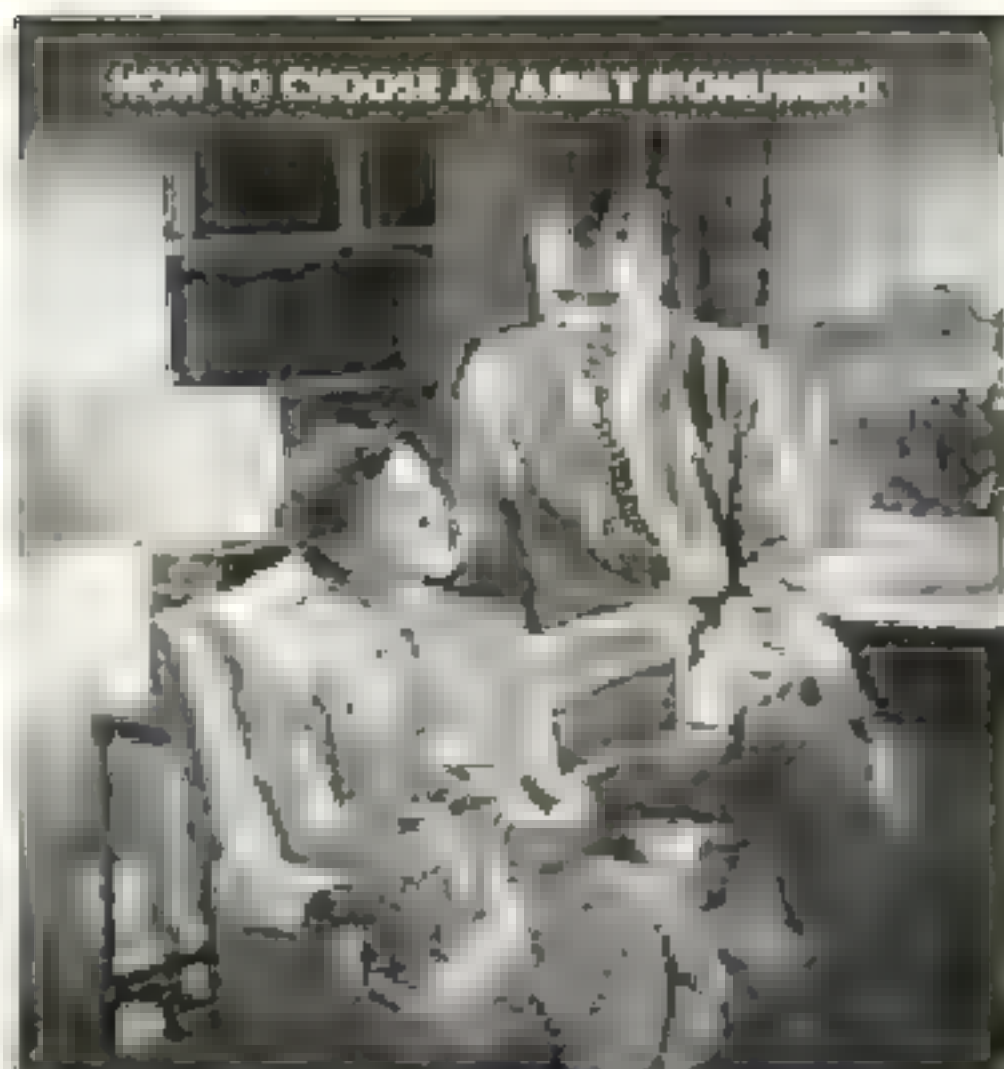
EXTRA COMFORT
EXTRA PLEASURE
no extra
fare!

*If I can make it easier
for her—later . . .*

"If by choosing our family monument now, it becomes in her mind a remembrance of the many things we have done together . . . if planning ahead will make it easier for her and the children . . ."

To decide this important matter now, while you and your loved ones are still together, will add immeasurably to their peace of mind when grief is upon them.

When you choose a Rock of Ages monument, you know that you have chosen the most beautiful, the most lasting granite in the world, unsurpassed in its standard of material and workmanship. And every Rock of Ages monument is backed by a signed and bonded Rock of Ages guarantee.



Many thoughtful people choose their family monument—as well as their cemetery lot—before the need arises. Ask your dealer or write Rock of Ages, Barre, Vermont, for "How To Choose a Family Monument"—a large illustrated book available without charge or obligation.

ROCK OF AGES

BARRE GRANITE FAMILY MONUMENTS

LAVORIS
MOUTHWASH AND GARGLE

Pre-prepare FOR YOUR DAY...

A CLEAN MOUTH MEANS A FRESH PLEASANT BREATH

DISINfects AND REMOVES GERM-HARBORING FILM FROM MOUTH AND THROAT

LAVORIS DOES A THOROUGH JOB SO PLEASANTLY



New England



New England Limited, 2000 Boston Building, Boston, Mass.

Gardens of Nations

OPEN FROM MAY 4 TO NOVEMBER 18

Flowers from all over the world are being grown in the gardens and grounds of the International Friendship Gardens. The gardens are open to the public from May 4 to November 18. The gardens are open to the public from May 4 to November 18. The gardens are open to the public from May 4 to November 18.

Write for FREE Brochure today!

International Friendship Gardens

MICHIGAN CITY INDIANA, U.S.A.

Mention the National Geographic If you see you



More alertness . . . *less danger from* **CANCER**

Although cancer ranks second among the causes of death in our country, headway is being made against it. In fact, medical science is making such progress against this disease that there are now *four chances out of five* for curing some types of cancer—provided diagnosis is made early and proper treatment is carried out promptly.

One of the reasons why there is increasing hope of bringing cancer under control is that more and more people are facing the facts about this disease. They are learning its possible early "warning signs" and are seeing their doctor as soon as they notice any of them.

These Are Cancer's "Warning Signs"

1. Any lump or thickening, especially in the breast.
2. Any irregular or unexplained bleeding.
3. Any sore that does not heal, particularly about the mouth, tongue, or lips.
4. Persistent change in the color or size of a mole or skin blemish.
5. Loss of appetite or continued indigestion.
6. Any persistent hoarseness, sore throat or difficulty in swallowing.
7. Any persistent change in normal elimination.

Pain is not usually an early symptom of cancer.

These "warning signs" do not necessarily mean cancer. In fact, in the great majority of cases, they are due to other causes. They are, however, *red flags* that something is wrong—and that an immediate medical examination is advisable.

If the doctor finds cancer or conditions leading to it, he will recommend prompt treatment—usually complete removal by surgery, destruction by X-ray or radium, or by a combination of the two.

Surgical techniques are constantly being improved so that operations for cancer may be performed with a minimum of risk. Machines that emit X-rays of greater penetrating power are making this form of treatment more effective.

Medical science is continuing its search for other ways to attack cancer. For example, hormone therapy is of benefit in some types of cancer, even when the disease is advanced. In addition, the search is on to discover chemical compounds which will destroy cancer cells without harming normal cells. Studies are also continuing on tests to detect cancer early.

While the outlook for the conquest of cancer becomes more hopeful each year, alertness on the part of each individual is still necessary to catch it. That is why doctors urge prompt medical care at the first sign of trouble—for cancer can be cured in most cases if detected and treated early.

Metropolitan Life
Insurance Company
LIFE INSURANCE COMPANY OF NEW YORK
120 Broadway, New York 20, N.Y.

Please send me a copy of your booklet, **What You Should Know About Cancer**.

Name

Street

City

State

cancer



Why young Puffinus is bigger than his parents

IN A few weeks, they'll be out on their own. If the shearwater, *Puffinus pacificus*, is concerned with food.

All day long, their parents shuttle between the beach and the nesting site with choice morsels for their fledglings. The young birds grow so fat from this extra feeding—that long before they leave the nest, they are bigger than their hard-working parents.

The accumulated fat soon serves a good purpose. For the grownups suddenly stop feeding their babies—and fly away. Left to count for themselves, the fledglings live off their surplus fat. Presently, they're strong enough—and streamlined enough—to fly, so they can skin up their own food from the air.

For the shearwater, getting a youngster off the ground is simply a matter of a few weeks' hard work. And sometimes don't you wish that the problem of bringing up your children were as simple as that!

But it isn't. Your children are going to need during the fledgling years—not only food but decent clothes, housing, an education, and a home. So isn't this a wise step for you to take right now?

Talk over your investment program with your Travelers agent or broker. Let him show you how—by investing a fraction of your income in Life and Accident Insurance—you can make sure your bread will never lack the care they took when they are growing up.


And as you talk with him, we have to mention that growing up these days costs a lot more than it did when you were under 2.

MOBIL: INSURE IN

The Travelers

ALL FORMS OF INSURANCE AND SURETY BONDS

The Travelers Insurance Company, The Travelers Indemnity Company, The Travelers Fire Insurance Company, The Hartford Fire Insurance Company, Hartford Steamboating Company, Hartford Construction Company, Hartford Accident and Indemnity Company, Hartford Life Insurance Company, Hartford Fidelity and Bond Company, Hartford Casualty Company, Hartford General Insurance Company, Hartford Marine Insurance Company, Hartford Reinsurance Company, Hartford Surety Company, Hartford Title Insurance Company, Hartford Underwriting Company, Hartford Insurance Agency, Hartford Insurance Broker, Hartford Insurance Consultant, Hartford Insurance Advisor, Hartford Insurance Planner, Hartford Insurance Strategist, Hartford Insurance Specialist, Hartford Insurance Generalist, Hartford Insurance Professional, Hartford Insurance Executive, Hartford Insurance Leader, Hartford Insurance Pioneer, Hartford Insurance Innovator, Hartford Insurance Visionary, Hartford Insurance Trailblazer, Hartford Insurance Trailblazer, Hartford Insurance Trailblazer.

A vintage Coca-Cola advertisement. The background is a large, close-up portrait of a man in a military-style uniform, smiling broadly. He is holding a glass of Coca-Cola in his right hand. The glass is filled with a dark liquid and has the Coca-Cola logo on it. The text "Thirst asks nothing more" is superimposed over the man's face. In the bottom right corner, there is a red Coca-Cola vending machine with the logo and the words "ICE COLD" on it. The overall color palette is muted, with a greenish-grey background.

Thirst asks nothing more

Yes sir, everybody knows
ice-cold Coca-Cola
is delicious and refreshing.



In color movies and color stills you'll live your trip all over again

With Kodachrome Film, you can keep the day-by-day action record in wonderful color movies. You can accent the high spots in gorgeous color stills.

Kodak movie cameras operate simply and surely...start at \$47.50. Kodak "miniatures" make color slides as easy as black and white snapshots. And Kodak's new "Pony 828" is only \$29.95. See them at your Kodak dealer's.

Faetman Kodak Company, Rochester 4, N. Y.

Prices subject to change without notice.



Only Kodak Miniature Cameras with 35mm film. They take 16mm film. Kodak Miniature Cameras are available in black or silver. Prices start at \$29.95 for the Pony 828. \$47.50 for the Miniature 828.



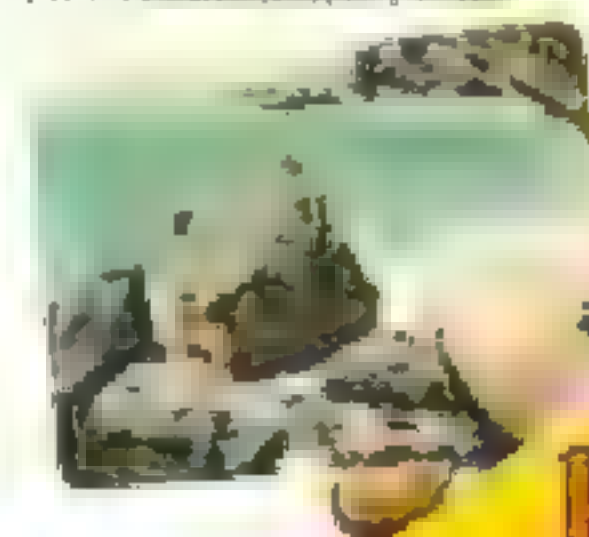
Kodak Table Viewer. The new 4X magnifier. It's the best way to see your color slides. It's the best way to see your color prints. \$19.95.



Slide Kodachrome movie camera. It's the best way to see your color slides.

Slide Kodachrome movie camera. It's the best way to see your color slides.

Slide Kodachrome movie camera. It's the best way to see your color slides.



Kodak
TRADE MARK

Prices subject to change without notice.

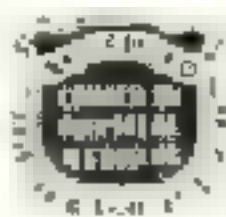
What A Blessing To Hear Again...



What a blessing to hear clearly again — **WITHOUT ANY UNSIGHTLY BUTTON SHOWING IN THE EAR!** A transparent, almost invisible device hides deafness. Learn about the revolutionary discovery that is *conquering deafness* in a way unknown before.

NO BUTTON Shows In Ear!

FREE! Find out how you may again hear precious sounds you may have cared were lost forever. Just mail coupon for valuable **FREE** book. No cost or obligation.



Beltone **MONO-PAC**
One-Unit Hearing Aid

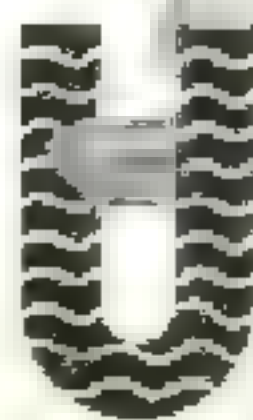
Beltone Hearing Aid Co., Dept. 2814
1450 W. 19th St., Chicago 8, Ill.

Mail Now For Valuable Free Book

Beltone Hearing Aid Co., Dept. 2814
1450 W. 19th St., Chicago 8, Ill.
Please send me the valuable **FREE** book on **OVERCOMING DEAFNESS** without a button showing in ear.

Name.....
Address.....
Town..... State.....

Explore the world's "BY-WAYS"
in the **NEW**
KLEPPER



nsinkable AERIUS
for SAIL, PADDLE, or MOTOR

Find new adventures, all the best fun that ever was had on a lake. Features and details in roomy and comfortable cabin, the world's first motor launch of UNsinkable!



Write for a copy of the **FREE** booklet "The AERIUS" and learn how you can have this fun on your lake. The AERIUS is the only motor launch of its kind. It is built of aluminum and is completely rust-proof. It is the only motor launch of its kind that is built of aluminum and is completely rust-proof.

FREE! Find out how you may again hear precious sounds you may have cared were lost forever. Just mail coupon for valuable **FREE** book. No cost or obligation.

FREE! *Wandering by Water*
The Great story of **KLEPPER** adventures
Write to **KLEPPER COMPANY**
Dept. 2814, 234 E. 17th St. N. Y. C. 10

You feel you *belong*
in **MAINE**



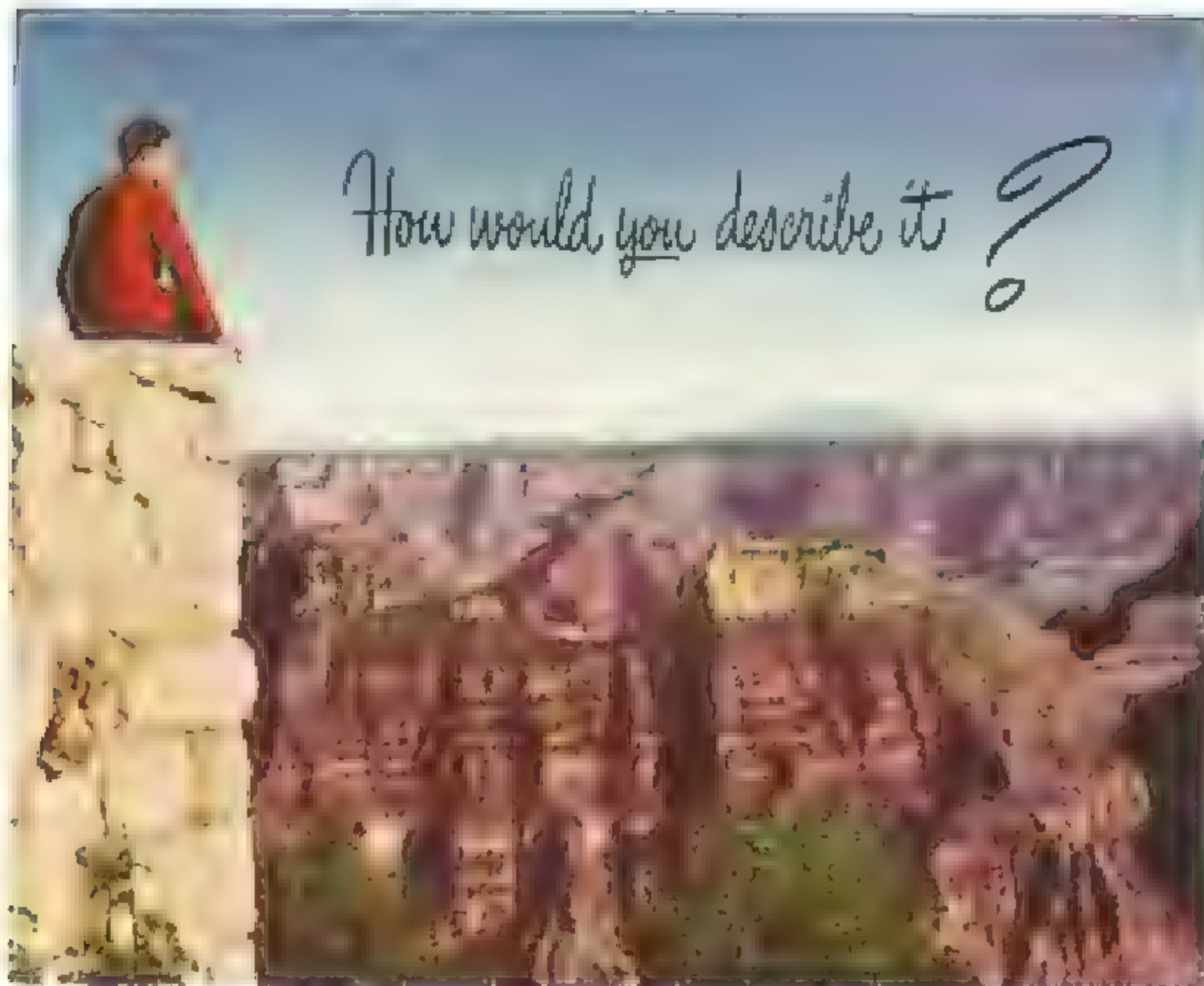
... when you plan your vacation in Maine, you will find a wealth of information in this book. It tells you where to go, what to do, and how to get there. It is the only book of its kind. It is the only book of its kind that is built of aluminum and is completely rust-proof.

START PLANNING YOUR

MAINE VACATION SERVICE
117 Gateway Circle, Portland, Maine
Please send my **MAINE VACATION PLANNING KIT**

Name.....
Street.....
City..... State.....
VACATION IN MAINE

MAINE Development Commission



How would you describe it?

GRAND CANYON NATIONAL PARK ARIZONA GO BY UNION PACIFIC RAILROAD



Imagine standing on the northern rim of Arizona's mile-deep Grand Canyon, a vast chasm thirteen miles wide and awash with glowing color. How would you describe it? Magnificent . . . spectacular? Actually, you must see it to fully appreciate its grandeur.

You can see not only Grand Canyon but also hear by Bryce Canyon and Zion National Parks on one glorious motor bus tour from Cedar City, Utah, rail gateway to the Parks.

Call for rates and times. Union Pacific Railroad, Room 2400, 1000 Broadway, New York 10003. Or write to: Union Pacific Railroad, P.O. Box 1000, Cedar City, Utah 84709.



Mail Coupon
for free Southern
Utah Arizona booklet
Beautifully illustrated

Union Pacific Railroad
Room 2400, 1000 Broadway
Please send free Southern Utah Arizona booklet
Name _____
Address _____
City _____ State _____
Also send me information on a Southern Vacation Tour
Including the trip and tour a motor bus tour _____

Camps

ADMIRAL BILLARD ACADEMY

Admiral Billard Academy, Box 10, New London, Connecticut.

CULVER SUMMER SCHOOLS

on Lake Michigan, 100 miles of lakes, 100 miles of forest, 100 miles of mountains. Culver Summer Schools, 48 Lake Shore Dr., Culver, Ind.

FARRAGUT NAVAL CAMPS

Farragut Naval Camps, Box 10, Town River, N. J.

GAY VALLEY

Gay Valley, Box 10, Gay Valley, N. C.

OGONTZ

Ogontz, Box 10, Ogontz, Pa.

SUSQUEHANNA

Susquehanna, Box 10, Susquehanna, Pa.

WIHAKOWI

Wihakowi, Box 10, Wihakowi, Md.

Cord Schools



DEAN'S SCHOOL

Dean's School, Box 10, Dean's School, Pa.

SOLEBURY SCHOOL

Solebury School, Box 10, Solebury School, Pa.

Girls' Schools

EDGEWOOD PARK

Edgewood Park, Box 10, Edgewood Park, N. Y.

ELLIS COUNTRY SCHOOL

Ellis Country School, Box 10, Ellis Country School, Pa.

FAIRFAX HALL

Fairfax Hall, Box 10, Fairfax Hall, Va.

GREENBRIER COLLEGE FOR 1917

Greenbrier College, Box 10, Greenbrier College, W. Va.

GULF PARK BY-THE-SEA

Gulf Park By-the-Sea, Box 10, Gulf Park By-the-Sea, Miss.

LASELL JUNIOR COLLEGE

Lassell Junior College, Box 10, Lassell Junior College, Mass.

LINDEN HALL

Linden Hall, Box 10, Linden Hall, Pa.

OAK GROVE & FRIENDS SCHOOL

Oak Grove & Friends School, Box 10, Oak Grove & Friends School, Pa.

SOUTHERN SEM. & JR. COLL.

Southern Sem. & Jr. Coll., Box 10, Southern Sem. & Jr. Coll., Va.

WALNUT HILL

Walnut Hill, Box 10, Walnut Hill, Pa.

MARJORIE WEBSTER JUNIOR COLLEGE

Marjorie Webster Junior College, Box 10, Marjorie Webster Junior College, Pa.

Colleges for Women

CHRISTIAN COLLEGE

Christian College, Box 10, Christian College, Pa.

MARYWOOD COLLEGE

Marywood College, Box 10, Marywood College, Pa.

Colleges for Men

PENNSYLVANIA MILITARY COLLEGE

Pennsylvania Military College, Box 10, Pennsylvania Military College, Pa.

Vocational

FRANKLIN TECHNICAL INST.

Franklin Technical Inst., Box 10, Franklin Technical Inst., Mass.

INDIANA TECHNICAL COLLEGE

Indiana Technical College, Box 10, Indiana Technical College, Ind.

KATHARINE GIBBS

Katharine Gibbs, Box 10, Katharine Gibbs, Pa.

Bryant College



CAMPUS TO CAREER IN TWO YEARS with a B.S. Degree

Bryant College, Box 10, Bryant College, Pa.

NATIONAL COLLEGE OF EDUCATION

National College of Education, Box 10, National College of Education, Pa.

TRI-STATE COLLEGE

Tri-State College, Box 10, Tri-State College, Pa.

Aviation

AERONAUTICAL ENGINEERING

FASTEST GROWING CAREER FIELD

Aeronautical Engineering, Box 10, Aeronautical Engineering, Pa.

Home Study

CALVERT "SCHOOL-AT-HOME"

Calvert "School-at-Home", Box 10, Calvert "School-at-Home", Pa.

CALVERT SCHOOL

Calvert School, Box 10, Calvert School, Pa.

It's Quick, Easy, Fun To Learn A LANGUAGE by LINGUAPHONE

Linguaphone, Box 10, Linguaphone, Pa.

Linguaphone Institute, Box 10, Linguaphone Institute, Pa.

RANDOLPH-MACON MILITARY ACADEMY ACCREDITED 60th Year

PREPARED for college through intensive study methods. At northern entrance to Skyline Drive, 15 miles from Washington, D. C. Purposeful buildings. Superior equipment. All athletes, cadets, cheerleaders, swimming pool, band. For catalog and "Your Boy" folder address Colonel John C. Beggs, Principal, Box 2, Front Royal, Virginia.

RANSOM SCHOOL Nine years on Highway 90, Florida. Prepares boys 13-18 for all colleges. Emphasis on scholastic achievement, sports, drumming, glee club. Honors, Goldstars, Raising, Raising, Raising. Ret. 1941. Catalog, D. Piers G. Cameron, Coconut Grove, Miami 33, Florida.

RIVERSIDE

Health and interest assured by Spring and Fall in Georgia mountains. Winter at Hollywood-by-the-Sea, Florida—two complete school plants, each with all facilities.

Fully accredited preparation for all colleges. Also Post Graduate Department. Separate School younger boys, grades 5-8. Constant association with selected teachers who live and eat with cadets. Weekly reports. Highest official Army rating. Progress GUARANTEED. Moderate rate (no extras). For illustrated catalog, address

GENERAL SANDY BEAVER, President

WINTER NEAR MIAMI Box 304-M, Gainesville, Fla.
FALL & SPRING IN BLUE RIDGE MOUNTAINS

ST. JOHN'S MILITARY Accredited college prep in heart of Wisconsin's Land of Lakes. Grades 7-12. Balanced program. Excellent faculty. Riding, golf, rifle marksmanship, sailing. Winter sports. Tilted. Numerous sessions. 45th Street, Carleton, 1948. DeMoss Hall, Oshkosh, Wisconsin.

SAINT THOMAS MILITARY ACADEMY Military training combined with superior college preparation in Catholic environment. Cadence, Pool, gym, sports, R. H. T. C. Raising, day. Catalog. Very Rev. V. J. Fiksa, Box 2, St. Paul 2, Minn.

SHATTUCK SCHOOL Boys Grades 9-12. Advanced educational, religious, military program. Accredited college prep. General courses, debate classes, M-I-ROTC, sports, gym, pool, golf. Raising, R. H. T. C. Raising school. Catalog. Dir. of Admissions, 515 Shattuck Way, Fairbault, Minn.

STAUNTON MILITARY ACADEMY

- ★ Distinguished academic record.
- ★ Successfully prepares for college.
- ★ Fully accredited. Business courses available.
- ★ Thorough military training develops poise, self-reliance.
- ★ ROTC unit. Army's highest rating. Complete athletic program.
- ★ Superior health record. Separate Jr. School 6th to 8th grades.
- ★ Along East. Box 2-4, Staunton, Va.



STONY BROOK 150 boys from 13 states and 10 countries. Widely known for Christian Education. Comprehensive education to each boy's needs. Superior college preparation. 11th grade and up. Raising school. 1000 nation. Frank E. Gabelstein, Litt. D., Box M, Stony Brook, Long Island, New York.

TENNESSEE MILITARY INSTITUTE One of America's really good schools. Grades 5-12. Over 40% of graduates enter colleges. Small, friendly classes. High scholastic standards. All sports and golf. ROTC. 11th year. Catalog. Col. C. B. Endley, Box 197, Sweetwater, Tenn.

THOMAS JEFFERSON SCHOOL Former graduates have entered colleges. Individual development in small classes, grades 5-12. Accredited. Boys cooperate in raising school. 42 acres. Sports, theater, music. Write for catalog. Robin N. McCoy, Headmaster, Rt. 2, St. Louis 23, Mo.

TILTON SCHOOL ESTABLISHED 1901. College prep. for boys. Fully accredited. One teacher to ten boys. All sports. New gym—5 basketball courts. Also Lower School—Grades 1 and 2. Moderate rate. Catalog. Dr. J. Roland Crompton, Box E, Tilton, New Hampshire.

THE TODD SCHOOL Todd's creative activity program is world famous. (Decorations, Music, Poetry, Story, Riding, Hiking, Bathing, Raising.) And these thrilling outlets for your boy's aptitudes are in addition to top college preparation and grades 1-12. Booklet. Box Q, Woodstock, Illinois.

TRINITY-PAWLING Accredited. Successful preparation for all colleges. Grades 1-12. Small classes. Raising school. Work program. Holiday school. Start from N.Y.C. 12-acre rural campus. Sports, Hiking, Raising. Catalog. M. E. Dunn, Headmaster, Pawling 2, N.Y.

VALLEY FORGE MILITARY ACADEMY

"At the Nation's Shrine"

Prepares and boys to enter leading colleges and at the same time be trained in quality for a commission in the Armed Services. Fully accredited. Highest Academic Standard. Cadets' Pool and R. R. Cadets, ages 12-18, all sports. Rty. Co., Infantry. Band. Cadet Troop ROTC. Catalog. Box M, Wayne, Pa.

WENTWORTH MILITARY ACADEMY 10th yr. up. High School. Separated year College. Raising ROTC, C.A.R. Raising. All accredited. Heart of America. Large Gym. Indoor pool. All sports. Riding. Marksmanship. Country Club. Summer School. Catalog. Col. J. M. Sellers, 841 Wash. Place, Lexington, Ma.

WESTERN MILITARY ACADEMY Faculty accepts responsibility for academic success. Inspires self-confidence, develops interest. Prepares for all colleges. Grades 5-12. Athletics, martial program. Riding. Pool ROTC. 11th yr. Catalog. Col. D. L. Jackson, Box H-4, Allen, Illinois.

WILLISTON ACADEMY CHURCH ADMINISTRATION recognizes the high quality of the training given students at Williston—INTERNATIONALLY KNOWN since 1917. Now Campus with all modern physical facilities. Separate Jr. Sch. Cat. on request. Phillips Stevens, Headmaster, Easthampton 3, Mass.

WORCESTER ACADEMY FOUNDED 1888. Superior preparation, personal guidance based on individual needs. Development of character and personality as important as scholastic standing. Grades 7-12. Pool. Phillips, Edm., Worcester Academy, Box Q, Worcester, Massachusetts.

PLEASE FILL IN BLANK BELOW, DETACH, AND MAIL TO THE SECRETARY.

Recommendation for Membership IN THE NATIONAL GEOGRAPHIC SOCIETY

* The Membership Dues, Which Are for the Calendar Year, Include
Subscription to the National Geographic Magazine.

To the Secretary, National Geographic Society,

Sixteenth and M Streets Northwest, Washington 6, D. C.:

1951

I nominate

PRINT NAME OF NOMINEE

Occupation

(This information is important for the records)

Address

PRINT ADDRESS OF NOMINEE

for membership in The Society.

Name of nominating member

PLEASE PRINT

Address

* DUES: Annual membership in United States, \$4.00; Canada, \$5.00; abroad, \$5.00. Life Membership \$100.00 U. S. funds. Remittances should be payable to National Geographic Society. Remittances from outside of continental United States and Canada should be made by New York draft or international money order.



Puts the World at Your Finger Tips

WEBSTER'S GEOGRAPHICAL DICTIONARY

gives you instantly the facts about the world's important places. Its 40,000 entries and 177 specially drawn maps offer the greatest fund of geographical information ever presented in a single volume. Invaluable in clarifying the vital news of the day, in planning trips, in checking facts about world trade. 1352 pages bound in rosewood buckram, thumb-notch indexed.

\$8.50

For Exact Use of Words

WEBSTER'S DICTIONARY OF SYNONYMS

is an essential tool for every writer and speaker. In presenting complete lists of synonyms it makes clear the distinctions between them and explains their exact meanings and use with illustrations. Antonyms also are given together with Analogous and Contrasted Words. Thoroughly cross-indexed, 944 pages bound in tan buckram, thumb-notch indexed.

\$5.00

Quick-Reference Facts about 40,000 Famous People

WEBSTER'S BIOGRAPHICAL DICTIONARY

offers concise information about 40,000 noted men and women of every country and every period of history down to the present. 1730 pages bound in brown buckram, thumb-notch indexed.

\$7.50

See these special Merriam-Webster dictionaries at your bookseller's or stationer's or write for descriptive folders to the publishers.

G. & C. MERRIAM CO. • Dept. 629 • Springfield 2, Mass.



NEW FULL COLOR VIEW-MASTER PICTURES IN THREE DIMENSIONS

FOR ARMCHAIR TRAVELERS

NEW REELS

Great Newberry State
The Ozarks, Mo.
Hemlock, Alaska
Amish Country, Pa.
Karnak, Utah
Oklahoma, Sooner State
Olympic Peninsula
Play, Germany
Great Panhandle
Colorado
Holy Land in Rome
Cowboy Rodeo
Cattle Roundup and
Branding
Performing Clowns
Acrobats

If you like to travel...to see far away historic and scenic attractions...you'll enjoy View-Master stereo pictures. These amazing color photographs actually show scenery in the thrilling "come to life" motion of three dimensions. Pictures are mounted in seven-color Reels for use in View-Master Stereoscopes and Projectors. Ask your dealer for free Reel List of over 100 entertaining, educational View-Master stereo subjects.

REELS 35c each, 3 for \$1.00

STEREOSCOPE \$2.00

JR. PROJECTOR \$9.95

AT SELECTED PHOTO, GIFT, DEPARTMENT STORES

Ask to see



VIEW-MASTER
STEREOSCOPIC
PICTURES

THIS YEAR VISIT
COOL, HIGH, SCENIC
West Virginia

WEST VIRGINIA INDUSTRIAL & PUBLICITY COMMISSION
State Capitol, Room 340 — Charleston 5, W. Va.

Please send free booklet, "Your West Virginia Vacation Preview"

NAME

ADDRESS

CITY STATE



New way of handling Long Distance

Operator Toll Dialing proves a big help in these busy days of national preparedness

Long Distance lines are really humming these days. There are many more calls than a year ago. More are from the Nation's industries and Armed Forces, hurrying the country's most important job.

A big help in keeping these calls moving is Operator Toll Dialing—a remarkable new telephone development.

You give the Long Distance operator the number in the usual way. She quickly presses several keys and your call goes straight through to the telephone you want in a distant city.

It makes for faster service—especially on calls that formerly had to be relayed through other cities.

With so many more calls on the lines, it's a mighty good thing that Operator Toll Dialing was developed and is now available and in use in so many places. About one-third of Long Distance calls are now being handled in this new way.

It is just one of many ways in which the growth and improvement of telephone service are now proving of extra value to the Nation in these days of preparedness.

BELL TELEPHONE SYSTEM





Every day's a new adventure... each night is packed with fun, as you sail the blue Pacific in a ship just made for ease. Games in the sun, hours by the pool, superb food — service that deftly anticipates every whim. After movies and dancing, and a stroll under tropic stars, you drift happily off to sleep in a comfortable stateroom. This is the trip you'll always treasure... *Cruise to Hawaii on the S.S. Lurline*



You loaf or play on deck



Famous cuisine



Something to do every minute



You meet new friends



Exotic adventures await you on the islands



Fashions by J. Magenta, E. A.

The Lurline sails from San Francisco and Los Angeles alternately

Matson to Hawaii

See your travel agent or Matson Line Offices
New York • Chicago • San Francisco • Seattle
Portland • Los Angeles • San Diego • Honolulu

